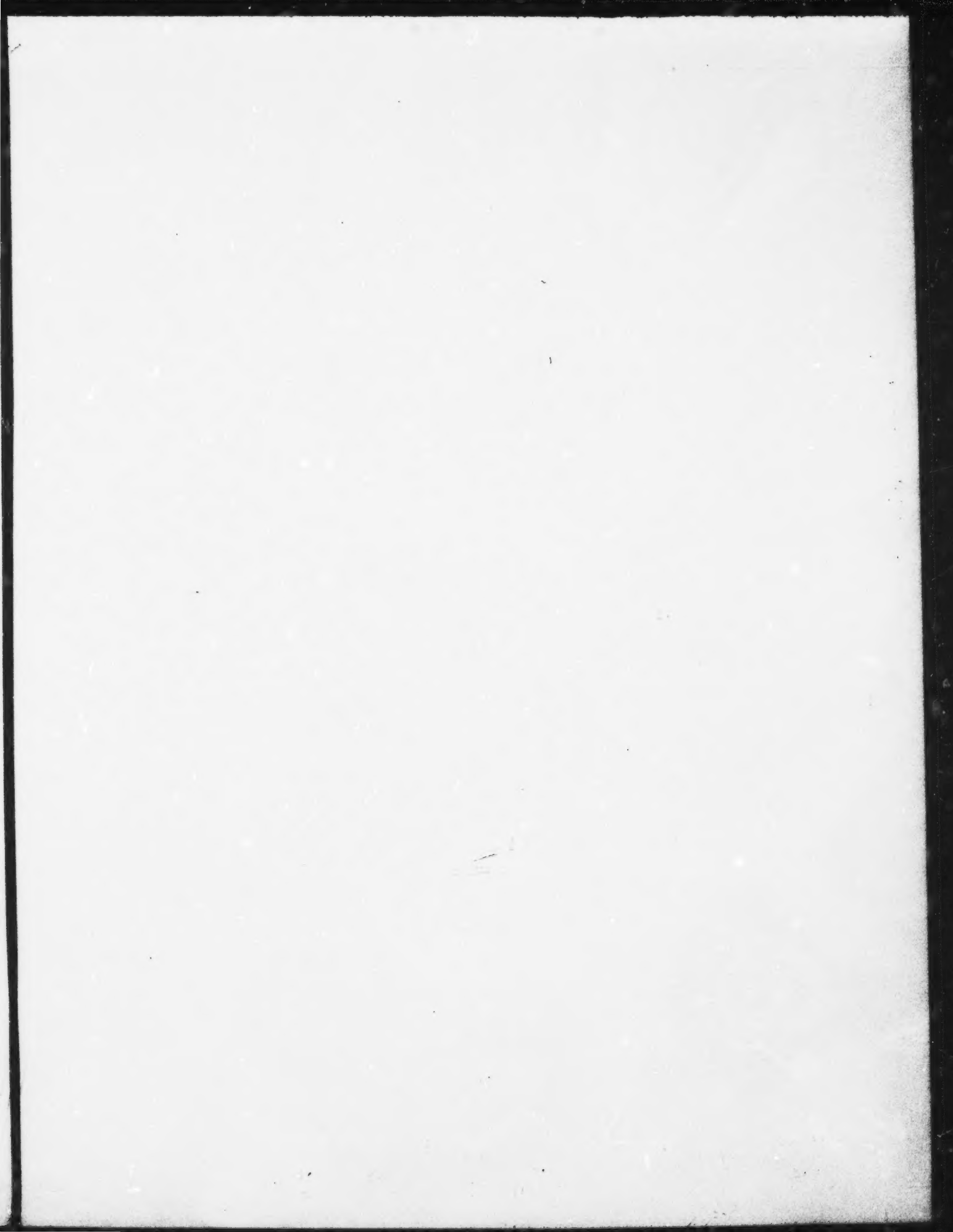






CASCADE
WILDERNESS
STUDY

Status Report

WYLA

CASCADE WILDERNESS STUDY

STATUS REPORT

ERRATA

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Please note that, due to printing error, the
Ministry is incorrectly titled.
The correct title is 'MINISTRY OF MUNICIPAL AFFAIRS'.

November, 1981

FOREWORD

This report documents the principal resource values in an area of some 40 700 hectares lying adjacent on the northwest to Manning Park. In addition, the report outlines three (3) possible options for the allocation and management of lands in the study area and recommends the agencies to assess these options and oversee completion of the study by early 1982. A two-year moratorium placed on all logging and mineral claimstaking in the study area currently expires in May 1982.

The Status Report was reviewed by representatives of lead agencies in April 1981 and was circulated in draft form to the Thompson-Okanagan and Lower Mainland Resource Management Committees in the same month. The draft report was also presented to the Tulameen Public Advisory Group, established in Princeton by the Ministry of Forests to review proposals for the future of the Tulameen River watershed, a part of the Cascade Wilderness Study area. Revisions to the draft report took into account comments from lead agencies in Victoria, the two Resource Management Committees and the Public Advisory Group.

The Cascade Wilderness Study Status Report was presented to the Environment and Land Use Technical Committee in August 1981*. The recommendations contained in the report (Section 5.0) were reviewed and endorsed by this Committee with the following changes:

Recommendations 1 and 2

The Parks and Outdoor Recreation Division of the Ministry of Lands, Parks and Housing and the Ministry of Forests are to oversee completion of the Cascade Wilderness Study. Agencies noted in recommendation #2 will be solicited as to their concerns during preparation of the final report. The draft report will also be circulated to these agencies for their comments.

Recommendations 3 through 9

These recommendations were endorsed with particular emphasis on #4 - analysis of three land allocation and management options. It was to be left to the Steering Committee to determine what areas of inadequate information, noted in recommendation #7, were essential to a fair and accurate assessment of the implications of each of the three land use options.

* The Environment and Land Use Technical Committee is comprised of the Deputy Ministers of nine Provincial Ministries: Agriculture and Food; Energy, Mines and Petroleum Resources; Environment (chair); Forests; Health; Industry and Small Business Development; Lands, Parks and Housing; Municipal Affairs and Transportation and Highways.

The final phase of the study is now underway and is being jointly coordinated by the Parks and Outdoor Recreation Division (Vancouver) of the Ministry of Lands, Parks and Housing and the Ministry of Forests (Kamloops). The study is expected to be completed by the early spring of 1982.

A companion technical report on soils - the Cascade Soil Survey - was prepared by the Terrestrial Studies Branch of the Ministry of Environment in February, 1981 and is available upon request from the Branch in Victoria.

Peter F. Walton

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ACKNOWLEDGEMENTS

Written contributions to the Cascade Wilderness Study Status Report were coordinated and/or prepared by the following individuals: Harry Marshall (Recreation Branch, Ministry of Forests), Gilbert McArthur (Mineral Resources Branch, Ministry of Energy, Mines and Petroleum Resources), Dave Suttill (Heritage Conservation Branch, Ministry of the Provincial Secretary and Government Services) and Mel Turner (Parks and Outdoor Recreation Division, Ministry of Lands, Parks and Housing). These same individuals, as well as Terje Vold and Paul Daykin (Terrestrial Studies Branch, Ministry of Environment), and Doug Herchner (Recreation Branch, Ministry of Forests), reviewed the Status Report in draft form and provided valuable comment. Mapping and graphics were done by John Meeres and typing (and retyping) by Donna Grunder and Terry Townsend, all of the Planning Branch, Ministry of Municipal Affairs.

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1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Background

The Cascade Wilderness Study began in February, 1980, when the Environment and Land Use Committee (E.L.U.C.) of Cabinet directed that an inter-Ministry program of resource evaluation be undertaken in an area of some 40,700 hectares lying adjacent to Manning Provincial Park on the northwest. This decision was prompted by long-standing interest in the area's historic trails by conservationists and proposed plans by forest companies to log portions of what was still a wilderness area.

The program of resource evaluation, to be coordinated by the ELUC Secretariat, was to be undertaken using non-destructive methods so as to cause minimum disruption to the environment. In May, 1980, as part of the study, a two-year moratorium was placed on all logging and mineral claim-staking in the proposal area until the decision on designation and management of lands and resources had been taken by the E.L.U.C. A status report on the program of resource evaluation was to be prepared in early 1981.

In September, 1980, responsibility for coordination of this first phase of the study was transferred to the Ministry of Municipal Affairs.

1.2 Purpose of Report

The purpose of this status report is three fold:

1. to document the forest, heritage, mineral and park and outdoor recreation values in the Cascade Wilderness Study area.
2. to identify the additional information needed before a decision can be reached on the designation and management

of lands and resources in the study area

3. to recommend the agency or agencies to coordinate this further work and oversee completion of the study

This status report is based on submissions by the following Provincial Ministries:

- Energy, Mines and Petroleum Resources (Mineral Resources Branch)
- Environment (Terrestrial Studies Branch)
- Forests
- Lands, Parks and Housing (Parks and Outdoor Recreation Division)
- Provincial Secretary (Heritage Conservation Branch)

In addition, information on the fish and wildlife resources of the study area was forwarded by the Princeton Fish and Game Club and the Okanagan-Similkameen Parks Society provided background material on the historic trails.

2.0 STUDY AREA

2.0 STUDY AREA

2.1 Location

The Cascade Wilderness Study area lies within the North Cascade Mountains adjacent to the northwest portion of Manning Provincial Park. The area's western boundary lies 18 km southeast of Hope; its eastern boundary lies approximately 30 km southwest of Princeton (Figure 1). The study area includes some 40,700 hectares (407 km²) of diverse, rugged and scenic landscapes ranging from valley bottoms to mountain peaks. It is bounded roughly by the heights of land between the peaks of Outram, Tulameen, Granite, Skaist and Snass Mountains (Figure 2).

2.2 Access

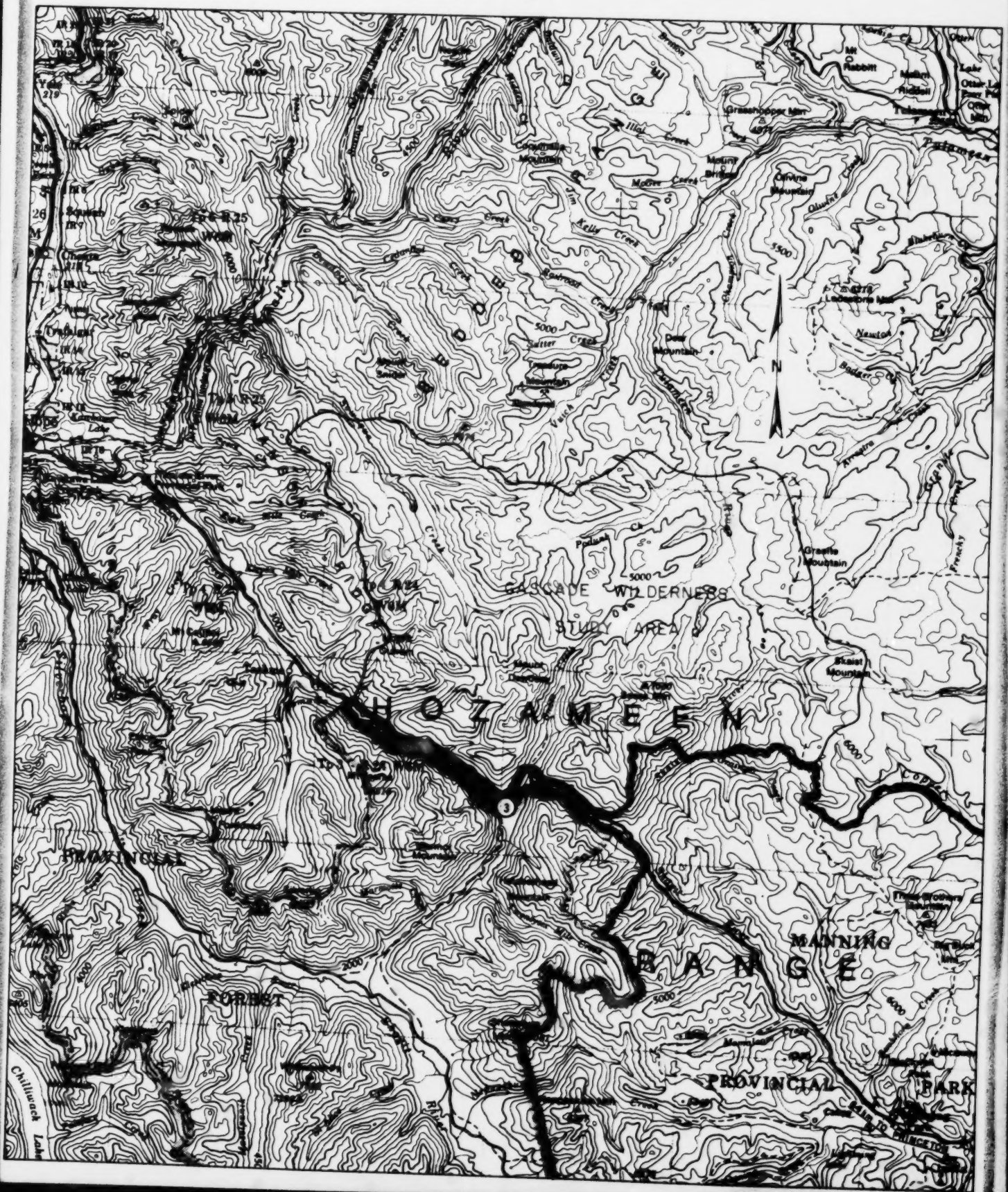
Road access into the study area is very limited. One may reach the outskirts of the area via the Hope-Princeton Highway #3 or by taking the Coquihalla road and turning up either Peers Creek or Sowaqua Creek drainages. The latter route is very unreliable as the road is no longer in use and is often impassable due to road bank sloughing and washouts.

Road access into the actual study area is from the southeast via Highway #3, Whipsaw Creek Road and a four-wheel drive road following the study's eastern boundary in the vicinity of Hope Pass and Kettle Mountain or from the northeast via a four-wheel drive road to the area immediately north of Wells Lake. All other access is either by foot or horse along trails or by helicopter.

2.3 Physiography

The study area lies entirely within the Hozameen Range of the Cascade Mountains, a region of moderate relief consisting of strongly folded and metamorphosed sedimentary and volcanic rocks (Holland, 1976), with some zones of igneous bedrock. The topography has generally resulted from the varying resistance to erosion of the underlying bedrock. The present surface and rather uniform height of peaks suggest that the relief has resulted from fluvial and glacial dissection of a late Tertiary erosion surface.

Figure 2 : CASCADE WILDERNESS STUDY AREA
SCALE - 1 : 250,000



Notable peaks within or on the border of the study area include Snass (2310m), Outram (2286m), Tulameen (2286m), Dewdney (2246m), Davis (2009m), Granite (1920m), and an unnamed peak northwest of Outram (2225m). These and other prominent peaks were probably above the ice during Pleistocene glaciation, but have been subject to alpine glaciation: cirque basins are especially evident on north and northeast facing slopes. The area is presently free of glacial ice; nivation processes are limited in extent. The predominance of rubbly colluvium on many valley slopes suggests that physical weathering and mass-wasting are major processes in the area.

Following the retreat to the northeast of the Thompson Plateau ice sheet (which covered the area during the last glaciation), meandering streams were left flowing through alluvium and glacial drift in relatively broad valleys of the Similkameen system to the north - Podunk Creek, Holding Creek and Paradise Valley. Conversely the Skagit system streams to the south - Snass, Skaist and Twenty Mile Creeks - experienced a smaller degree of glaciation. This, along with higher precipitation, has resulted in more vigorous, steep streams within deeply incised, steep-sided valleys.

2.4 Climate

The study area straddles the divide between coastal and interior influences. Although no climate stations occur within the study area itself, data from Hope Slide station to the west and from Allison Pass to the southeast give an indication of existing climatic conditions and are shown on Table 1.

In general the climate can be described as Humid Continental dominated by mild, moist Pacific air most of the year. The region is characterized by cool to cold winters with high precipitation, and warm, drier summers. Because of the considerable variation in altitude (elevation range from 600 to 2400 m within the area) and because the Hozameen Range divide runs central through the area, large local variations in climate can be expected.

Table 1

MONTHLY AND ANNUAL MEAN TEMPERATURE AND TOTAL PRECIPITATION DATA FOR HOPE SLIDE AND ALLISON PASS¹

	Jan	Feb	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
<u>HOPE SLIDE</u>													
Elev. 701 m													
Mean Temp. (°C)	-5.8	-1.0	1.3	4.2	9.8	12.3	14.1	14.0	10.1	5.5	1.0	-3.2	5.1
Total Prec. ² (mm)	213	127	109	81	38	61	28	25	81	112	109	203	1234
Total Snow (water equiv. mm)	138	65	47	34	--	--	--	--	--	4	26	117	469
<u>ALLISON PASS</u>													
Elev. 1340 m													
Mean Temp. (°C)	-7.3	-4.5	-3.4	1.1	3.9	8.4	12.3	11.8	7.8	3.4	-3.4	-6.2	2.2
Total Prec. ² (mm)	254	164	126	95	67	61	34	48	70	113	193	227	1452
Total Snow (water equiv. mm)	227	141	115	74	24	3	--	--	2	34	147	200	955
¹ Figures are 6 to 7 year averages for Hope Slide and 8 to 9 year averages for Allison Pass. ² Total precipitation is snowfall plus rainfall. Rainfall totals can be achieved by subtracting snow water equivalent from total precipitation.													
SOURCE: Environment Canada (1973).													

Mean annual temperatures within the area range from about 5°C to 2°C or lower at high altitudes. It is estimated that the entire area experiences fewer than 100 days frost-free; between altitudes 1000 and 1150 m, 60 to 75 frost-free days exist; from 1150-1650 m, only 30 to 50 frost-free days are expected (Green, 1971).

Mean annual precipitation ranges from 1200 to 1400 mm, increasing westward and with elevation. The zone of maximum precipitation occurs just west of the divide whose axis trends northward through the area; precipitation will drop sharply eastward as one enters the interior "rain shadow". Due to the high frequency of frontal systems in winter and their orographic enhancement, nearly 75% of total annual precipitation occurs in October through March, and due to the high altitude of the area, about 80% of this falls as snow. Snowpacks vary greatly in depth from year to year, however, and in all years most snow has melted by early July.

Microclimatic features such as mountain-valley local circulations and the pooling of cold air in valley bottoms can be expected at local sites, a consequence of several north-south trending valleys.

2.5 Vegetation

Ranging in elevation from 750m to 2450m the Cascade Wilderness Study area contains four of British Columbia's eleven Biogeoclimatic zones reflecting the transition between coastal and interior climates (Figure 3). These four zones occur as follows:

Coastal Western Hemlock : 750m - 1200m

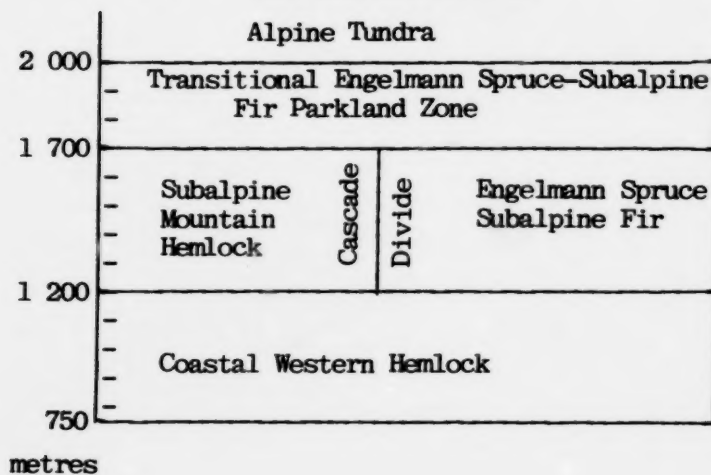
Subalpine Mountain Hemlock : 1200m - 1700m (dominant west of the Cascade divide)

Engelmann Spruce - Subalpine Fir : 1200m - 1700m (dominant east of the Cascade divide)

(Transitional Engelmann Spruce - Subalpine Fir Parkland subzone : 1700m - 2000m)

Alpine Tundra : above 2000m

Figure 3 Biogeoclimatic Zones



3.0 RESOURCE VALUES

3.0 RESOURCE VALUES

3.1 General

As directed by the Environment and Land Use Committee of Cabinet, the forest, heritage, mineral and park and outdoor recreation values of the Cascade Wilderness Study area are documented in this section. The evaluation by the Ministry of Forests includes an assessment of timber volumes and associated dollar values and employment figures as well as grazing data. The heritage resources have been evaluated by the Heritage Conservation Branch of the Ministry of Provincial Secretary and Government Services and include a description of the historic trails within the study area as well as an ethnographic summary. Existing information on mineral resources has been documented by the Ministry of Energy, Mines and Petroleum Resources. The park and outdoor recreation evaluation includes an assessment of the resource by both the Ministry of Lands, Parks and Housing (Parks and Outdoor Recreation Division) and the Ministry of Forests (Recreation Management Branch).

In addition, a reference to the soil resources of the study area - documented by the Terrestrial Studies Branch of the Ministry of Environment - and a brief assessment of wildlife values have been included.

3.2 Timber

The Cascade Wilderness Study area includes part of two (2) forest regions: the Vancouver Forest Region and the Kamloops Forest Region (Figure 4). The western half of the study area is within the Vancouver Forest Region and includes the Sowaqua Creek, 17-20 Mile Creeks and Snass Creek drainages. The eastern half of the study area is within the Kamloops Forest Region and includes the Podunk Creek, Paradise Valley and Skaist River drainages. Consequently, timber volumes, estimated dollar values for this volume, associated employment figures and data on established licensees are broken down on a regional basis.

Commercial tree species within the study area include : Douglas fir (Pseudotsuga menziesii), amabilis fir (Abies amabilis), western red cedar (Thuja plicata), western hemlock (Tsuga heterophylla), Engelmann spruce (Picea engelmannii), lodgepole pine (Pinus contorta). To date, no timber harvesting has occurred within the study area.

Generalized land capability for forestry is illustrated in Figure 5*. Capability ranges from high - lands having few to slight limitations to the growth of commercial forests - through moderate and low to nil - lands having no capability to grow commercial forests. These latter lands include alpine areas, talus slopes and avalanched areas.

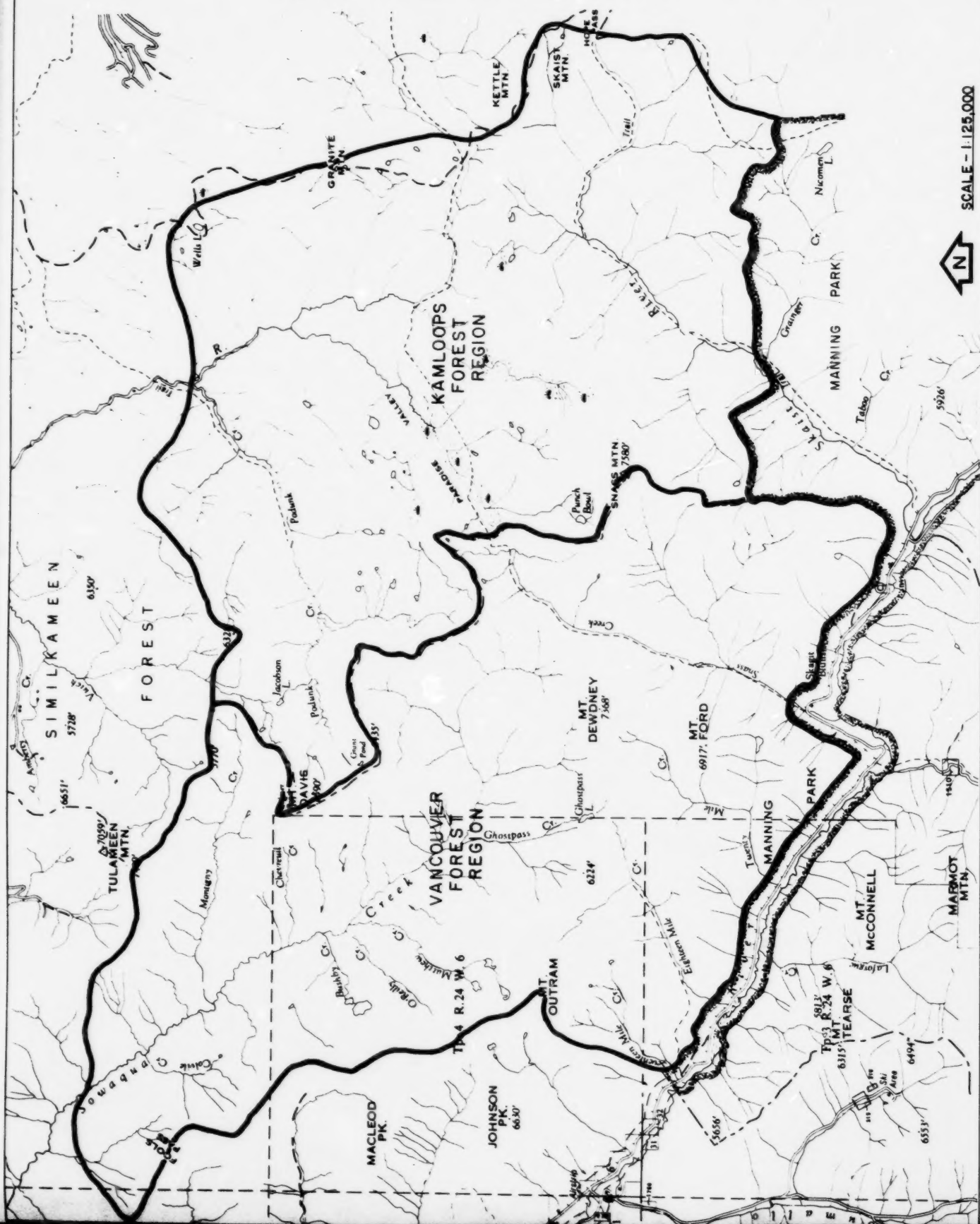
Table 2 below deals with the total number of hectares in forest and non-forest land by Forest Region within the study area. Table 3 breaks this down further and provides the total number of hectares in mature and immature forest as well as site class by area for mature timber.

TABLE 2 TOTAL HECTARES IN FOREST AND NON-FOREST LAND BY FOREST REGION

	Vancouver Forest Region	Kamloops Forest Region	Total
Forest	10 194	14 554	24 748
Non-Forest	10 981	4 971	15 952
Total	21 175	19 525	40 700

* Vold, T. and Daykin, P., 1981. Cascade Soil Survey

Figure 4 : FOREST REGION BOUNDARIES



This is a detailed topographic map of the Mt. Dewdney area in British Columbia, Canada. The map features a large, irregularly shaped area outlined in a thick black line, representing a forested region. This area is filled with various patterns corresponding to different forest cover types. The surrounding landscape is depicted with contour lines indicating elevation, with labels such as 4000, 5000, and 6000 feet. Several place names are visible, including 'SIMILKAMEEN FOREST', 'MT. DEWDENY', 'JOHNSON PK.', 'MT. MCCONNELL', and 'MANNING PARK'. A legend in the bottom right corner defines the forest cover patterns: 'HIGH' (solid black), 'MODERATE' (cross-hatch), 'LOW' (dotted), and 'NIL' (white). A scale bar indicates a scale of 1:125,000, and a north arrow is present.

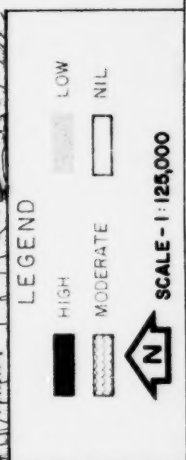


TABLE 3 TOTAL HECTARES OF MATURE/IMMATURE TIMBER BY FOREST REGION

	Vancouver Forest Region	Kamloops Forest Region
<u>Mature Timber</u>		
Site Classes by Area		
Good	0	1 842
Medium	2 394	2 508
Poor	3 196	1 744
Low	193	11
Total	5 783	6 105
<u>Immature Timber</u>		
Total	4 411	8 449
Total Mature and Immature	10 194	14 554

3.2.1 Vancouver Forest Region

Within the Vancouver Forest Region, the study area is part of the Yale Timber Supply Block (TSB) of the Fraser Timber Supply Area (TSA). The Fraser T.S.A. has an existing timber supply commitment 12% greater than the sustainable yield. The study area is included within the proposed Botanie Provincial Forest but has been made a Deferred Planning Area pending the outcome of this study.

If timber harvesting were to be prohibited within the Vancouver Forest Region portion of the study area, it would reduce the long run sustainable yield in the Fraser T.S.A. by 39 936 m³/year or 2.5%. This is equal to 8.1% of the Licensee commitment in the Yale Timber Supply Block.

On losing this timber to other land uses, a value of roughly \$1 161 000 in timber (based on recent 3 month average selling price on the Vancouver Log Market) per year would be foregone. This dollar figure includes stumpage revenue of \$399 360, or \$10.61/m³ based on the average bid stumpage price (1979) on T.S.H.L.s within the Vancouver Forest Region.

The following forest companies are established Licensees in the Yale T.S.B.:

<u>Licensee</u>	<u>Annual 'Quota' Commitment - m³</u>
Allison Pass Sawmills	1 571
C.F.P. Ltd.	764
Cattermole	108 371
Nicola Valley	1 996
Pretty's Timber Ltd.	70 775
Rayonier	68 454
Victoria Plywood	24 969
Whonnock Lumber Ltd.	206 762
Whonnock & Allison Pass	6 582

Total 490 244

There are three chart clearance areas (*) in the Vancouver Forest Region of the study area:

<u>Licensee</u>	<u>Tenure</u>	<u>Chart Area No.</u>	<u>Start Development</u>
Pretty's Timber Ltd.	T.S.H.L. A06405	4	4 - 5 years
Whonnock Lumber Ltd.	T.S.H.L. A00623	21	3 years
Herman Log Sales)			
Moon Logging Ltd.)	T.S.H.L. A00635	7	6+ years
Skagit Logging Ltd.)			

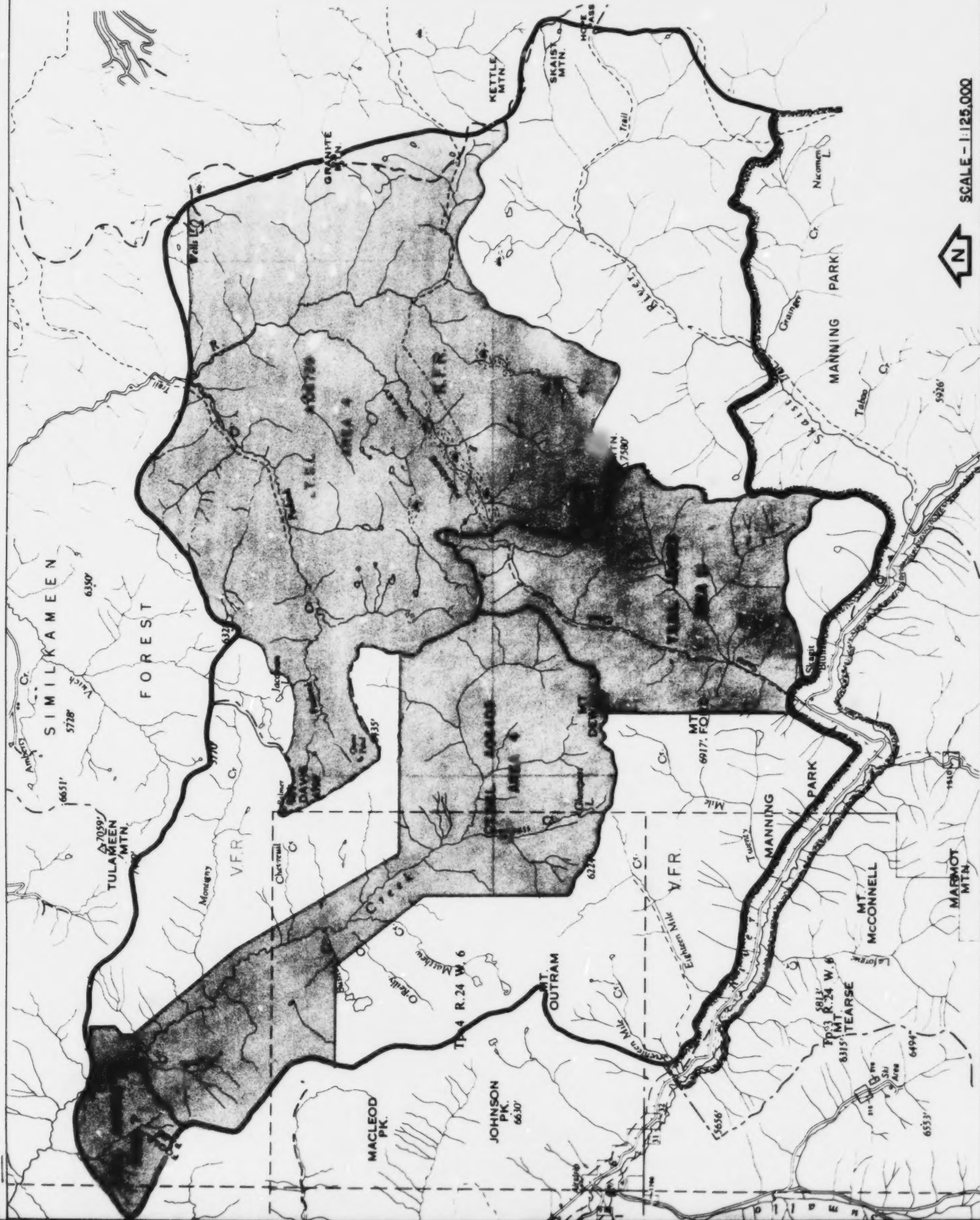
These chart areas are illustrated in Figure 6.

3.2.2 Kamloops Forest Region

Within the Kamloops Forest Region, the study area is part of the #6 Timber Supply Block of the Merritt Timber Supply Area and is within the Similkameen Provincial Forest. The Merritt T.S.A. has an existing timber supply commitment 16.5% greater than the sustainable yield unadjusted for unsalvaged losses and land alienations. If Ministry of Forests projections for these two factors prove accurate, timber supply commitments within the Merritt T.S.A. will exceed the sustainable yield by 66% over 144 years.

(*) Chart clearance is a preliminary step which determines land status and provides other resource management agencies an opportunity to express their concerns prior to the application for a cutting permit.

Figure 6 CHART CLEARANCE AREAS



SCALE - 1:125,000



If timber harvesting were to be prohibited within the Kamloops Forest Region portion of the study area, it would reduce the Annual Allowable Cut in the Merritt T.S.A. by 46 215 m³/year. As this is a gross figure - the net A.A.C. would be reduced by the volume within Environmental Protection Areas and inaccessible sites - the long run sustainable yield would be reduced by a lesser amount. As a gross figure, this represents some 4.7% of the long run sustainable yield - net would be less - and 4.0% of the Licensee commitment in the Merritt T.S.A.

The Annual Allowable Cut represented by timber in the Kamloops Forest Region portion of the study area was calculated as follows:

Mature Timber Volumes By Type

<u>Species</u>	<u>Volume in Cubic Meters</u>
Spruce	1 963 220
Balsam	568 092
Lodgepole Pine	192 332
D. Fir	24 024
Hemlock	5 880
Cedar	2 660
White Pine	2 408
Cot. and Birch	2 100
Total Mature Volume	<u>2 760 716 m³</u>

Total Area in hectares (ha) of:

mature timber	6 104
immature timber	6 719
non-commercial	4
N.S.R.	1 727
non-forest	4 971
Total Study Area (Kamloops F.R.)	<u>19 525</u>
Total Area of Forest Land	<u>14 554</u>

Site Classes by Area (ha):

good site	3 293
medium site	4 732
poor site	6 510
low site	19
Total	<u>14 554</u>

Calculation of Annual Increment (AI)

Immature area by site class
Mean Annual Increment (MAI) at
culmination age

<u>Site Class</u>	<u>Imm. Area(ha)</u>	<u>MAI m³/ha</u>	<u>AI m³</u>
good	1 451	3.25	4 716
medium	2 224	2.21	4 915
poor	4 766	1.31	6 244
low	8	0.35	3
			15 878 m ³

Annual Allowable Cut (AAC) Calculation

mature volume 2 760 716 m³
rotation age 91 years
annual increment 15 878 m³/year

$$AAC = \frac{2\,760\,716}{91} + 15\,878 = \underline{\underline{46\,215\,m^3/year}}$$

Stumpage revenues to the Crown, using 1979 rates, would be foregone in the amount of:

spruce	33 274 m ³	x \$5.66 =	\$188 330
pine	3 235 m ³	x \$1.28 =	\$ 4 140
B & O/S	9 706 m ³	x \$1.31 =	\$ 12 714
			\$205 184 per year

were this volume of timber to be unavailable for harvesting.

Within the Kamloops Forest Region, Balco Industries has applied for clearance for Chart Area #4 in T.S.L. A06759 in Podunk Creek and the upper Tulameen (Figure 6). Processing of this application has been held in abeyance pending the outcome of this study.

3.2.3 Employment

Estimates of employment foregone, should the timber within the study area not be made available for harvesting, have been provided by both the Vancouver and Kamloops Forest Regions. These estimates raise numerous technical and interpretive questions. At the time of writing, it was not possible to resolve all of these questions

satisfactorily. Rather, the estimates of employment foregone are given below and accompanied by a listing of the technical and interpretive concerns. Clearly, additional attention needs to be paid to these estimates in the final phase of the Cascade Wilderness Study to ensure maximum clarity and validity.

The estimate for the Vancouver Region is derived by the same method as that used on p. 3 of the Tsitika Watershed Integrated Resource Plan, Summary Report Volume II. This method, in turn, is based on information in the report entitled "The British Columbia Forest Industry - Its Direct and Indirect Impact on the Economy" prepared for the B. C. Forest Service by F.L.C. Reed and Associates Ltd., September 1975. Much data for the calculations in the Reed report is from Statistics Canada.

Based on an AAC of 39 936 m³ for the Vancouver Forest Region portion of the study area and using the method noted above, the following employment is estimated to be foregone:

¹ Direct Logging	@ 2 166 m ³ /person year	18 jobs
" " Milling	@ 1 132 m ³ /person year	35 jobs
¹ Indirect	@ half of direct jobs	27 jobs
¹ Induced	multiplier of 2	80 jobs
		Total 160 jobs

The estimate of employment foregone provided by the Kamloops Forest Region is as follows:

Direct Logging and Milling	60
Indirect @ half of direct jobs	30
Induced multiplier of 2	90
Total	180 jobs

¹The Reed Report states that "direct employment in the forest industry is provided by jobs in logging and in the manufacturing sector" (p. 47). Indirect employment is created by the forest industry through the use of transportation services, construction expenditures, the purchase of a wide variety of materials and supplies and the like (p. 50). In contrast to supplying the industrial requirements of the forest sector itself, induced employment results from satisfying the "personal requirements" — the full range of consumer products and services — of those directly and indirectly employed by the forest sector (p. 52).

This is derived by assuming one (1) person year of direct employment/ 770 m³ of gross AAC. The indirect and induced jobs are calculated from this base figure.

A difficulty arises in comparing the estimates for the two regions as (i) each region uses a different method of calculating the employment foregone and (ii) the Vancouver Forest Region calculation is based on a net AAC while that of the Kamloops Forest Region is based on a gross AAC.

It is also important to keep in mind the following when reviewing the above estimates:

- (1) The Statistics Canada publications on Logging (25-201) and Sawmills, Planing Mills and Shingle Mills (35-204) divide British Columbia into Coastal and Interior Zones for forestry data purposes. The data provided suggests that the relationships between m³ of timber (cut or finished) and direct employment varies quite markedly between the Coastal and Interior Zones, i.e. substantially more direct employment is created per m³ of timber on the Coast than in the Interior. This would serve to significantly reduce the estimates of employment foregone for the Kamloops Forest Region, assuming that the Ministry of Forests' Regional boundaries are coincident with Coastal and Interior boundaries as defined by Statistics Canada, and also assuming (perhaps incorrectly) that those portions of the two Forest Regions within the study area are representative of their respective "statistical" regions.
- (2) The estimates of total employment foregone, including indirect and induced employment, represent jobs not only in Princeton and Merritt but throughout the region and Province. The Reed Report (previously noted) speaks of "basic and non-basic" employment - for each basic (or direct) job there is one non-basic (multiplier of 2) - and this can be interpreted as being roughly equivalent to "local" employment, i.e. all the communities in the area (Princeton, Merritt, etc.).
- (3) Even this estimate of "local" employment can be questioned, as Reed again states that the multiplier - one non-basic job for each basic

job - may be less than 2 in small communities where most goods and services required locally will have to be obtained elsewhere.

- (4) The extent to which improved silvicultural techniques, more intensive forest management, technological advances and utilization of currently non-commercial species increase the availability and volume of timber supplies, thus offsetting potential employment losses.

In summary, while it is clear that there would be jobs foregone if timber harvesting were to be prohibited within the study area, it is also clear that the estimates of employment foregone require more careful investigation in the final phase of the study to ensure greater reliability.

3.3 Heritage

The heritage resources in the study area consist of the historic trails, other historic resources and archaeological resources. With respect to the latter two categories, the concern is basically for the simple physical protection of the above surface features, or the subsurface features, as the case may be. With respect to the trails, there are other concerns above and beyond simple protection of remnants of the original trail grade. This is discussed further in Section 4.2.

Constraints on the 1980 field program of the Heritage Conservation Branch did not permit a comprehensive survey of the archaeological resources of the study area. Only the Hope Pass Trail was field checked for signs of prehistoric activity. Results here were negative. However, based on experience and on ethnographic literature, the upper Tulameen River basin would be expected to contain evidence of prehistoric summer use activity. Areas of potential interest include the confluence of Podunk Creek and the Tulameen River and the subalpine areas in Paradise Valley, Punchbowl Lake and at the headwaters of Podunk Creek. An ethnographic summary of the study area is provided in section 3.3.2.

3.3.1 Historic Trails

The Heritage Conservation Branch identifies five historic trails within the boundaries of the Cascade Wilderness Study area that played a major role in the early history and commerce of British Columbia:

Hudson's Bay Company Brigade Trail	1849
Dewdney Trail	1860
Whatcom Trail	1858
Blackeye's Trail	(1846)*
Hope Pass Trail	1861

* 1846 refers to the recorded date when this trail was first used by a European, A. C. Anderson. The trail was in use by native peoples for an unknown number of years before this. All other dates refer to the year in which the trail was first established.

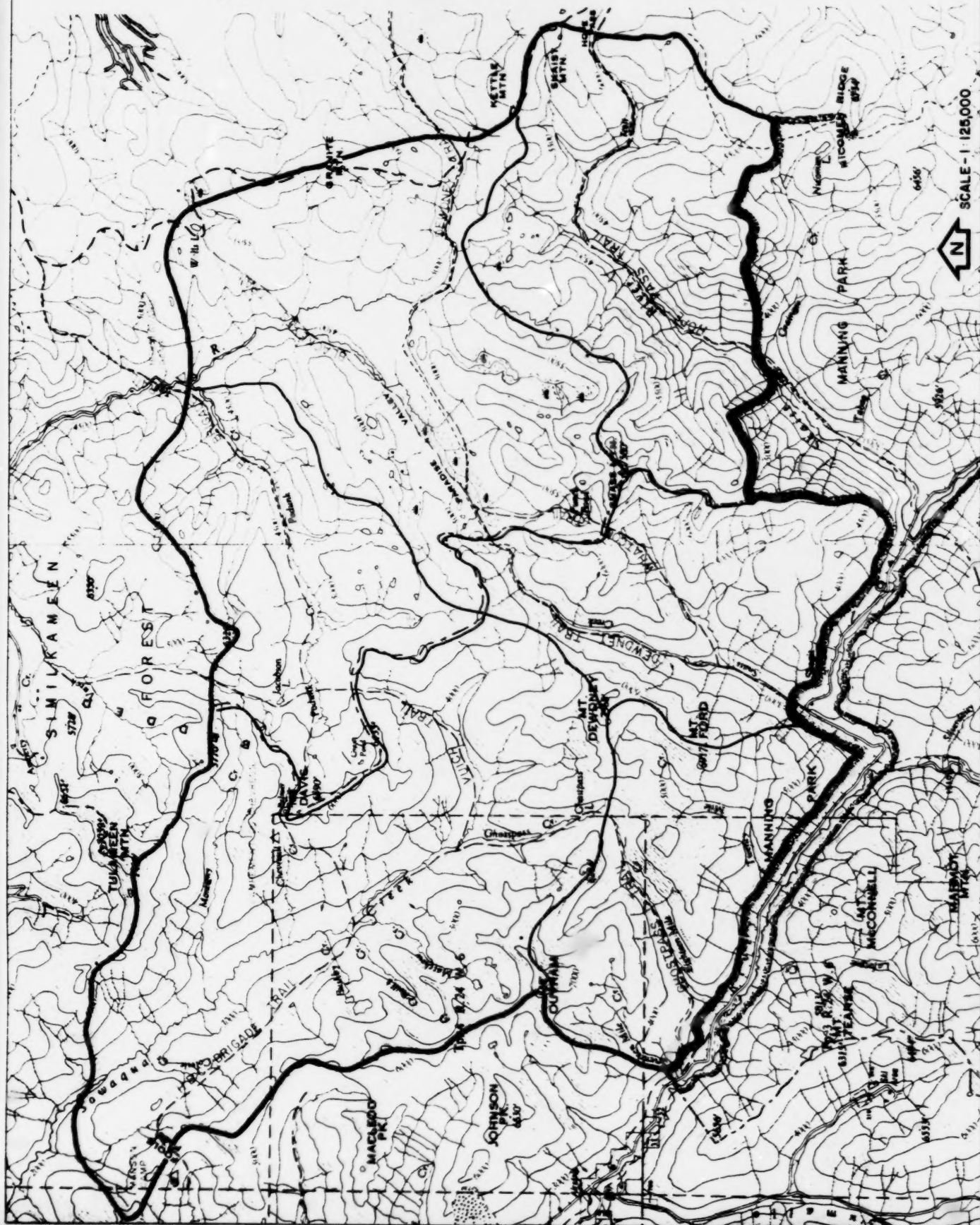
Two additional minor trails exist in the area: the Ghostpass Trail, probably in use as early as 1860 when it served as an alternate "Brigade" Trail for at least one year, and the Vuich Trail, blazed, probably by prospectors, later than the Brigade or Dewdney Trails (Figure 7).

Of the five former trails, two — the Hudson's Bay Company Brigade Trail and the Dewdney Trail — should be considered among the most significant historic trails in the Province (Figure 8). All five would be included among the Province's twenty most significant trails. The uniqueness of the trails in the study area stems from their close physical proximity as well as the fact that, in most cases, the sections of trails in the area are the last significant original lengths of trail remaining. Associated with the Hudson's Bay Company Brigade Trail are three historically important HBC campsites: Manson Camp, Campement du Chevreuil and Horseguard Camp. Campement du Chevreuil contains the grave of Paul Fraser.

A brief history of the five trails must begin by noting that British Columbia's mountain ranges have always presented serious obstacles to travel across or within the Province. This is particularly true for the Coast Mountains. The Fraser River forms the obvious major access route from the Strait of Georgia to the interior. Above Hope, however, rapids and steep canyon walls have made construction of roads and trails difficult. To avoid this, in historical times many different routes have been explored and put to use east of Hope. While not all have endured, the early trails in the Cascade Wilderness Study have survived principally because the routes that were followed became obsolete.

The first attempt at locating an overland route through the mountains of southern British Columbia was by Alexander Caulfield Anderson in 1846. He was seeking a route between Fort Kamloops and Fort Langley because the newly established boundary between American and British territory gave Americans control over the Columbia River outlet to the sea. His route to Fort Langley took him via Seton, Anderson, Lillooet and Harrison Lakes. On his journey he proceeded up the Fraser River to the present site

Figure 7 HISTORIC TRAILS OF THE CASCADE WILDERNESS



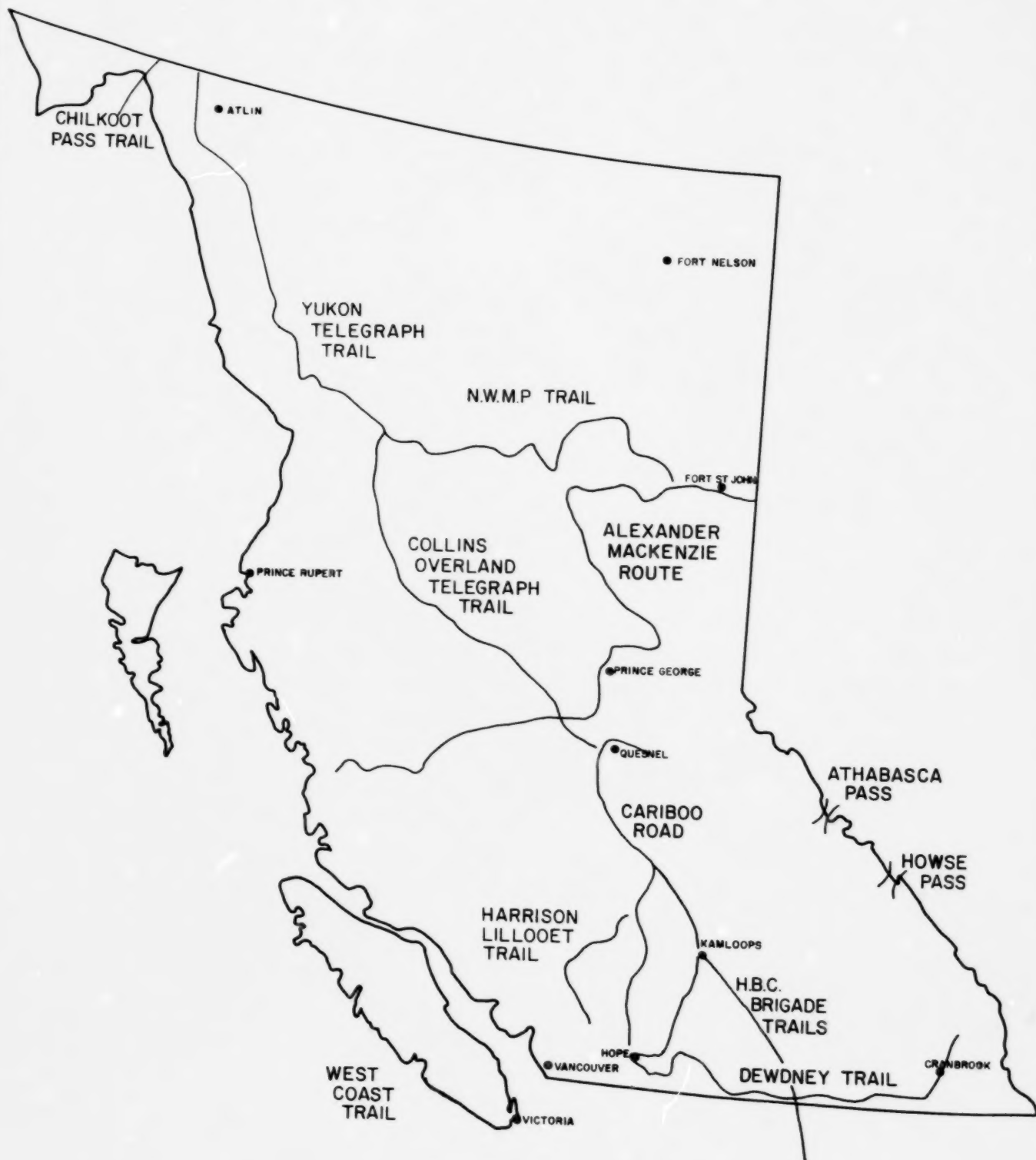


Figure 8 : MAJOR HISTORIC TRAILS
IN BRITISH COLUMBIA

of Hope. From there he went in an easterly direction via the Coquihalla River, Nicolum Creek, Skagit River, and over the Cascade divide via the east fork of Snass Creek to a little lake he named Punchbowl Lake. From there he followed the Tulameen River to the present site of Tulameen where he met an old Indian called Blackeye and his son-in-law. He then continued north via Otter Lake where Blackeye's lodge was located. From Blackeye he learned that were it not for the snow near the headwaters of the Tulameen River (it was early June), his party could have followed a more direct trail that led to Otter Lake via Lodestone Mountain. This particular trail has since been called Blackeye's Trail.

Thus Anderson's was the first recorded visit by a European into the area of the Cascade Wilderness. However, it was not until 1849 that the Hudson's Bay Company established a trail through the area. The line of this trail was determined by Henry Peers who was working for the Hudson's Bay Company in Fort Langley. It went over Manson's Ridge and Mt. Davis to join Blackeye's Trail near Lodestone Mountain. The trail, though quite rigorous, became the main access route to the interior for the Hudson's Bay Company for the next ten years or so.

Various gold discoveries in British Columbia from 1858 onward attracted great numbers of people and so made a big impact on lines of communication. That same year De Lacy attempted to establish a direct route to the interior of British Columbia that originated in Bellingham Bay. He succeeded in building a circuitous trail via Chilliwack Lake and the Skagit River to Punchbowl Lake where it joined up with Blackeye's Trail.

Efforts to use this route called the Whatcom Trail did not amount to much because of its length and the difficult terrain that it covered.

In 1860, the Colonial Government under Governor Douglas conducted investigations for a route from Hope to the Similkameen District to provide access to the mining country, thereby facilitating some means of control over this activity. Edgar Dewdney was subsequently awarded the contract for the construction of the required mule road. Most of the actual location work was done by Sergeant McColl of the Royal Engineers. However, this route didn't prove to be entirely satisfactory as an alternate route was built by Captain Grant, also of the Royal Engineers, the following year. This route differed from the 1860 route in that it utilized Skaist Creek, Hope Pass and the upper portion of Whipsaw Creek. At the same time, the Royal Engineers succeeded in upgrading the western portion of the new route which coincided with that established the previous year to a wagon road. The new route has since been called the Hope Pass Trail while the original 1860 route is referred to as the Dewdney Trail.

Figures 9, 10 and 11 which follow are copies of historic maps of four of these trails.

Figure 9

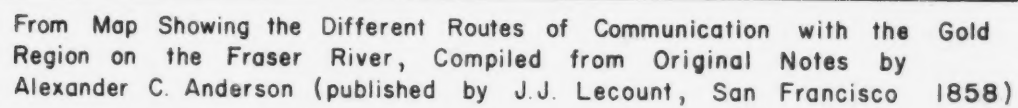
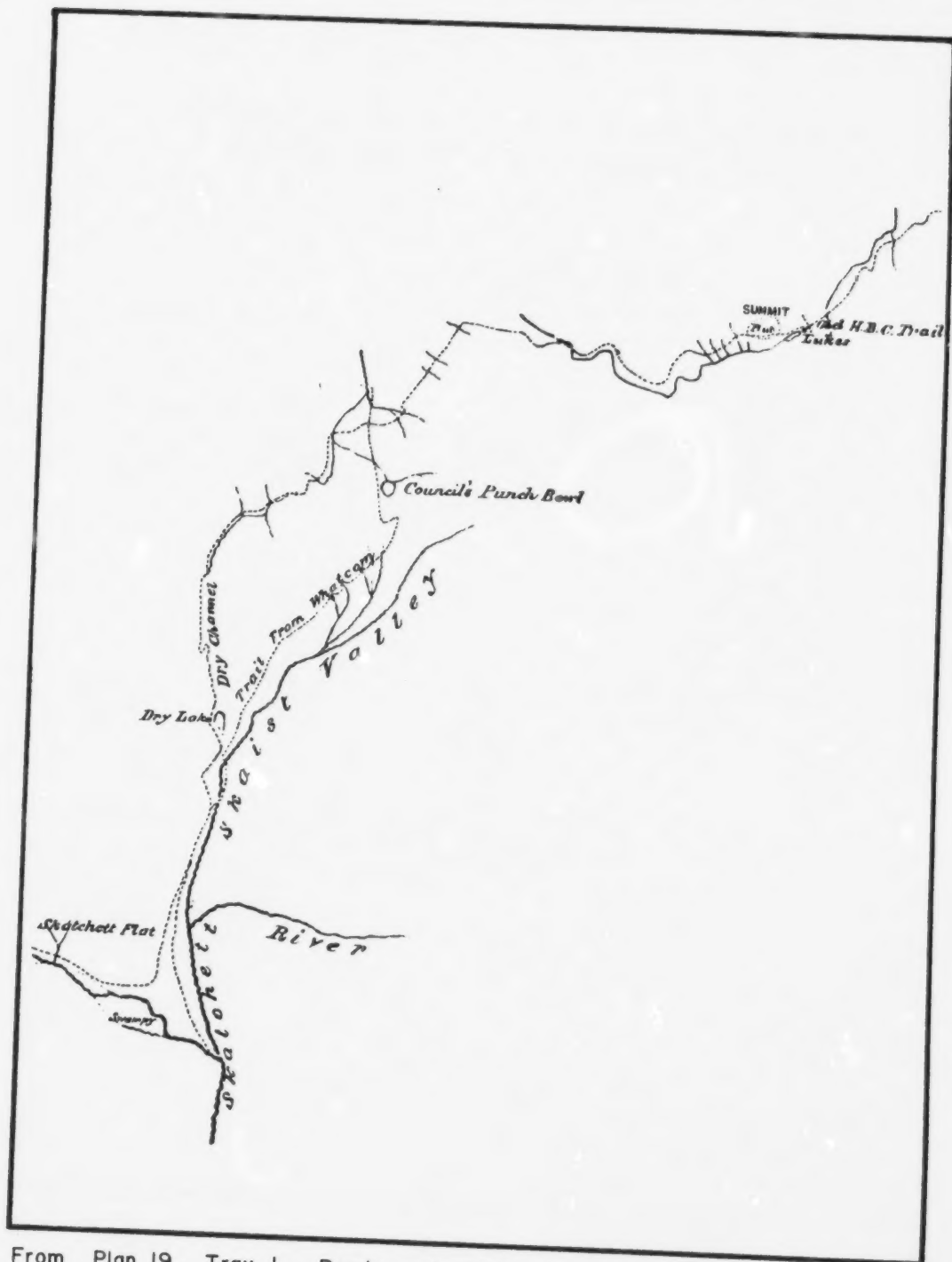


Figure 10

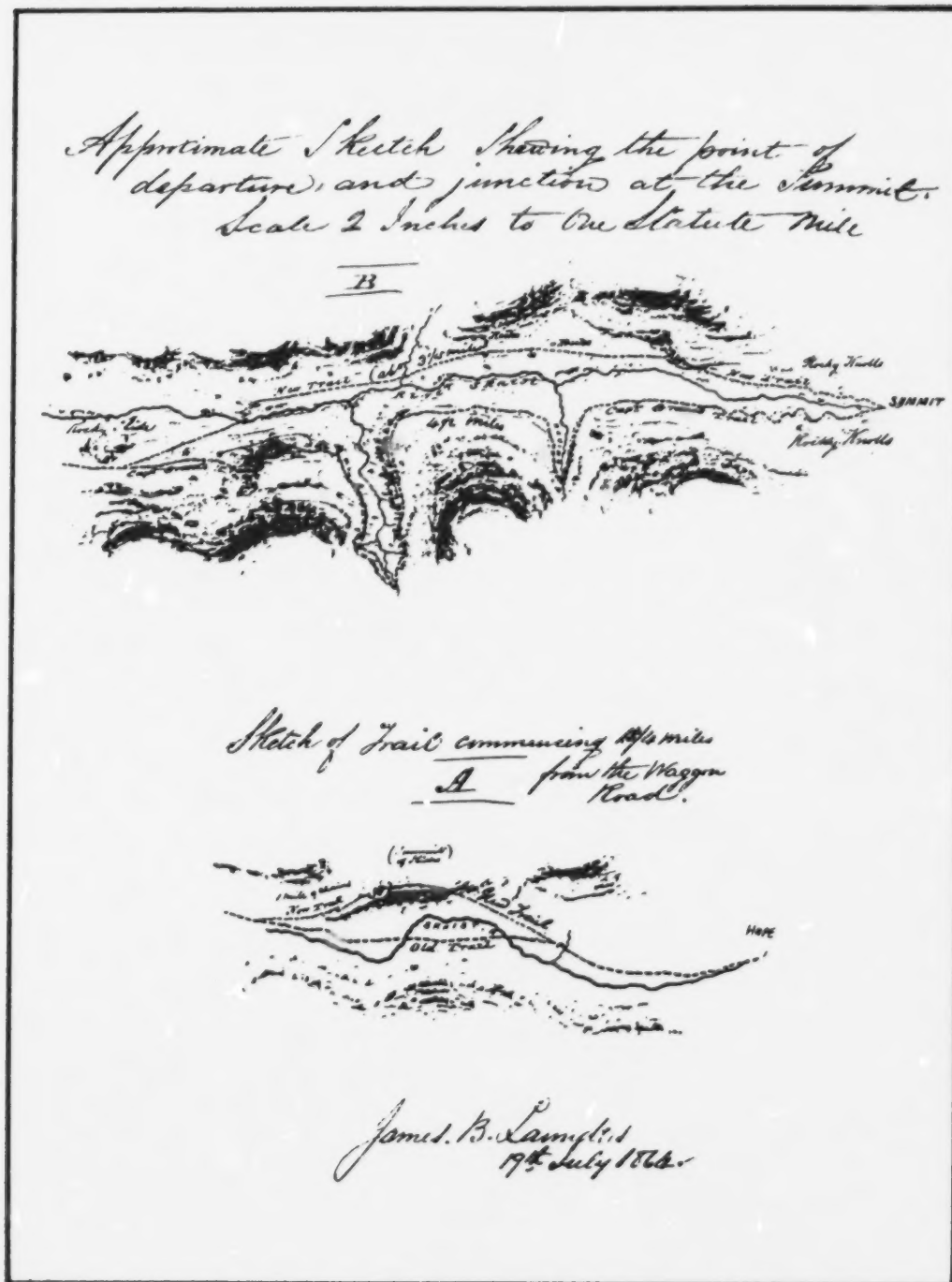
DEWDNEY TRAIL AND WHATCOM TRAIL



From Plan 19, Tray 1, Roads and Trails in Legal Surveys Vault,
B.C. Ministry of Environment (drawn by A.T. Breakenridge, Sapper R.E.,
in 1861).

HOPE PASS TRAIL

Figure 11



From Report by James Saunders, 19 July 1864 in Provincial Archives of B.C.

3.3.2 Ethnographic/Archaeological

The lands encompassed within the study area were never the focus of any major settlement by native peoples. The area did afford a seasonal resource exploitation base and a route for crossing the Cascade range, but while Indian groups in this area took full advantage of the former feature (seasonal resource availability), they intentionally shunned the opportunity afforded by the latter (route for crossing). The study area was frequented by three ethno-linguistic native groups (Figure 12), two of Interior Salish affiliation (Thompson and Okanagan groups), the other of Athapaskan affiliation (Stuwix).

The Thompson and Okanagan participated in exchange networks and traded with one another actively. It is noteworthy that this trade took place during the months of July and August when mountain passes were clear of snow and access was feasible through the Cascades. It is also important to note that the trade route through the Cascades was not of much importance until the arrival of the horse (Teit 1928:254), an event that made the journey less arduous and trading more lucrative given the larger inventories possible. There is some evidence to suggest that the Stuwix enjoyed a middleman position between the Thompson and the Okanagan (Teit 1928:252) but this would have been a relatively short lived circumstance.

While the study area was never occupied on a year-round basis, it was the scene of both hunting forays and trading expeditions during the brief summer season. That the Cascade trade route was relatively unimportant prior to the introduction of the horse has already been mentioned. It should also be noted that some Indian groups opposed the opening of the historic Brigade Trails through this area. This opposition stemmed from the Fraser Valley Halkomelem speakers who not only saw their middleman trade position vapourizing but also saw a direct access for the residents of the Similkameen River country to initiate raiding expeditions (Creech

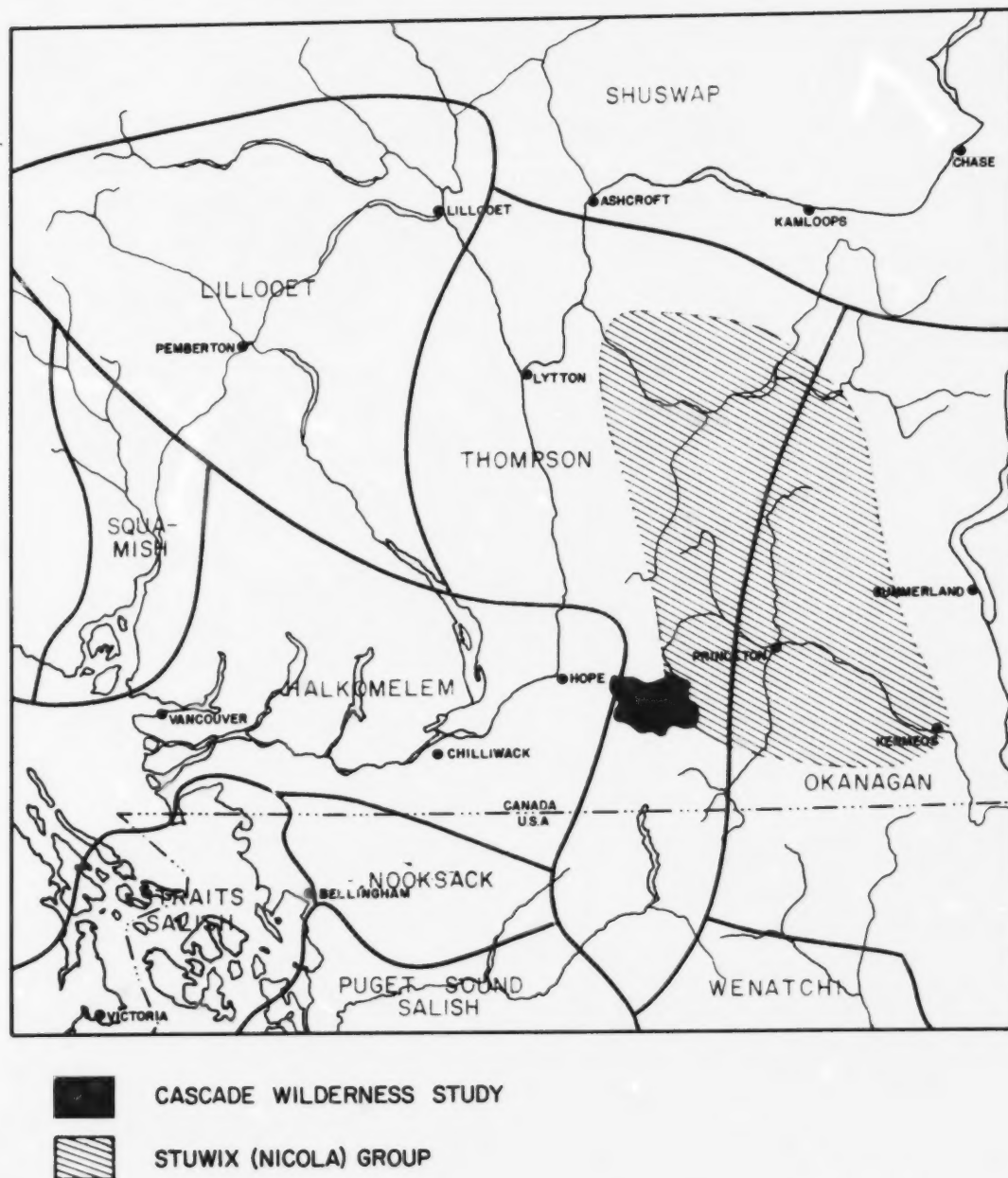


Figure 12 : ETHNO-LINGUISTIC AREAS IN SOUTHWESTERN B.C.

1941:260).

With the exception of Blackeye's Trail, there are no known archaeological sites in the study area at this time. This, however, reflects in part the lack of field surveys in the areas with high potential for archaeological sites. Such areas would include Paradise Valley and the junction of Podunk Creek and the Tulameen River. There are many possibilities as to the actual types of sites such areas might contain. The most likely evidence would consist of temporary camps from which summer use activities were conducted. Such sites would probably contain old fire hearths. Other features associated with temporary camps would include cache pits, broken tools, lost or cached tools, rock art and possibly even trade goods. Sites such as quarry sites, kill sites and hunting trails are also likely to exist in the study area.

3.4 Mineral

Mineral potential in the area is largely unknown. Based on geologic environment, a moderate (3) and high (2B) mineral potential is indicated in the western two-thirds (2/3) of the study area (Figure 13). There is generally indeterminate (4) mineral potential in the remainder of the area with the exception of the northeast corner which is indicated as moderate (3). Favourable environments project northwesterly-southeasterly through the area.

Known mineral occurrences are few within the study area (Figure 14):

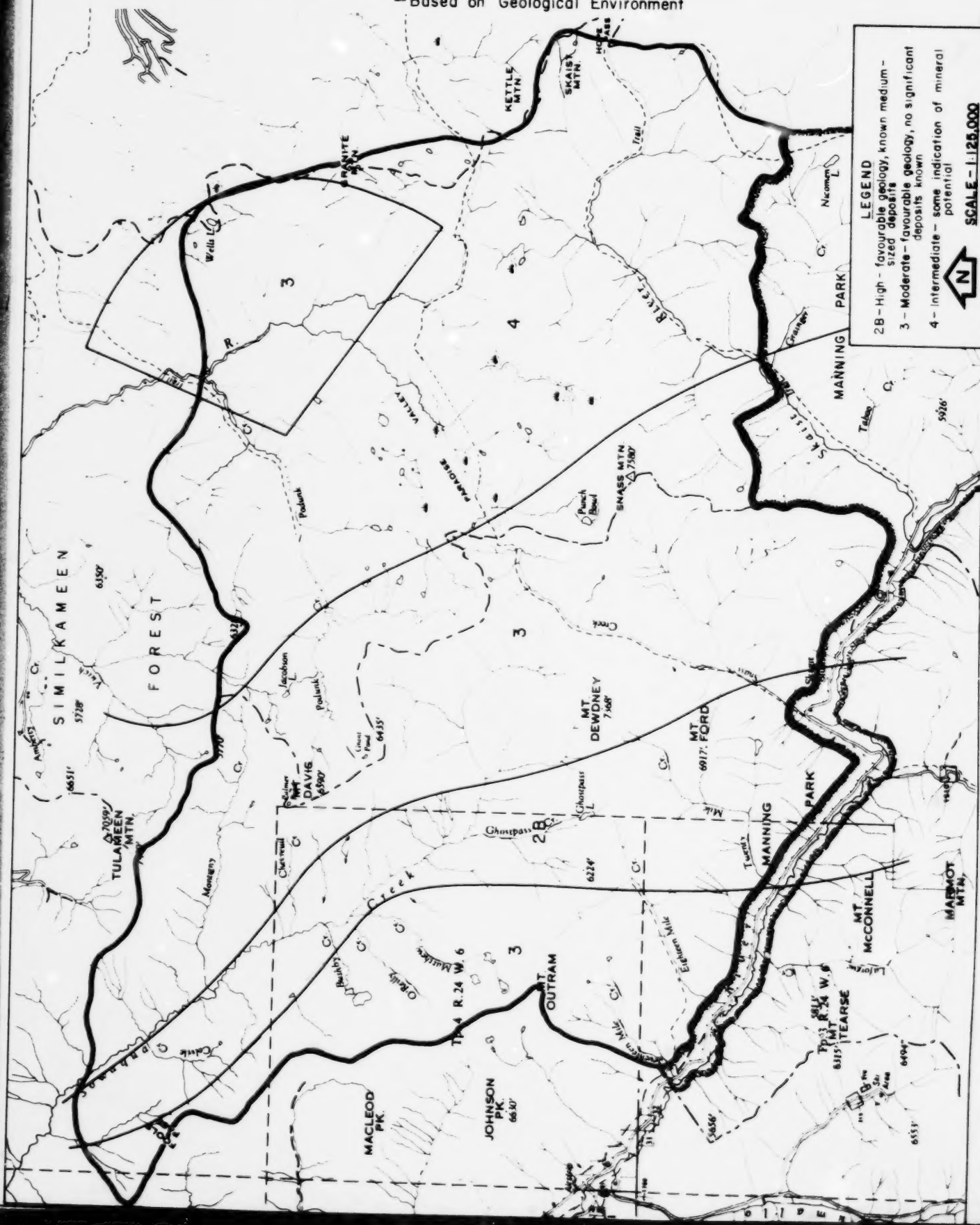
92H/SW	40	Forks Ni
92H/SE	75	Rio Grande (Lucky Strike) Ag, Pb, Zn.
92H/SE	101	Granite Scheelite Au, Ag, Cu, Zn, W.
92H/SE	136	Wel Cu, Mo.

There are no reserve figures for any of these occurrences.

Staked claims presently in good standing within the study area are minimal (Figure 14). The east half of the study area lies within a placer designated area. There are presently no placer leases within the area.

A coal slurry pipeline reserve also exists which runs through Snass Creek and Paradise Valley.

Figure 13 MINERAL POTENTIAL
—Based on Geological Environment



LEGEND

MINERAL OCCURRENCE
CURRENT CLAIM

SCALE - 1:125,000

AG - SILVER
AU - GOLD
CU - COPPER
FE - IRON
LS - LIMESTONE
MO - MOLYBDENUM
NI - NICKEL
PB - LEAD
SB - ANTIMONY
W - TUNGSTEN
ZN - ZINC

MINERAL OCCURRENCE
CURRENT CLAIM



SCALE - 1:125,000

Ag - SILVER
Au - GOLD
Cu - COPPER
Fe - IRON
Ls - LIMESTONE
Mo - MOLYBDENUM
Ni - NICKEL
Pb - LEAD
Sb - ANTIMONY
W - TUNGSTEN
Zn - ZINC

3.5 Parks and Outdoor Recreation

3.5.1 Format

The assessment of park and outdoor recreation values has been undertaken by two Provincial agencies: Parks and Outdoor Recreation Division, Ministry of Lands, Parks and Housing and the Recreation Branch, Ministry of Forests.

For ease of documentation, the specific park and outdoor recreation values of the study area are discussed separately by drainage. There are six major drainages within the study area (Figure 15):

Sowaqua Creek
17-20 Mile Creeks
Snass Creek
Podunk Creek
Paradise Valley
Skaist River

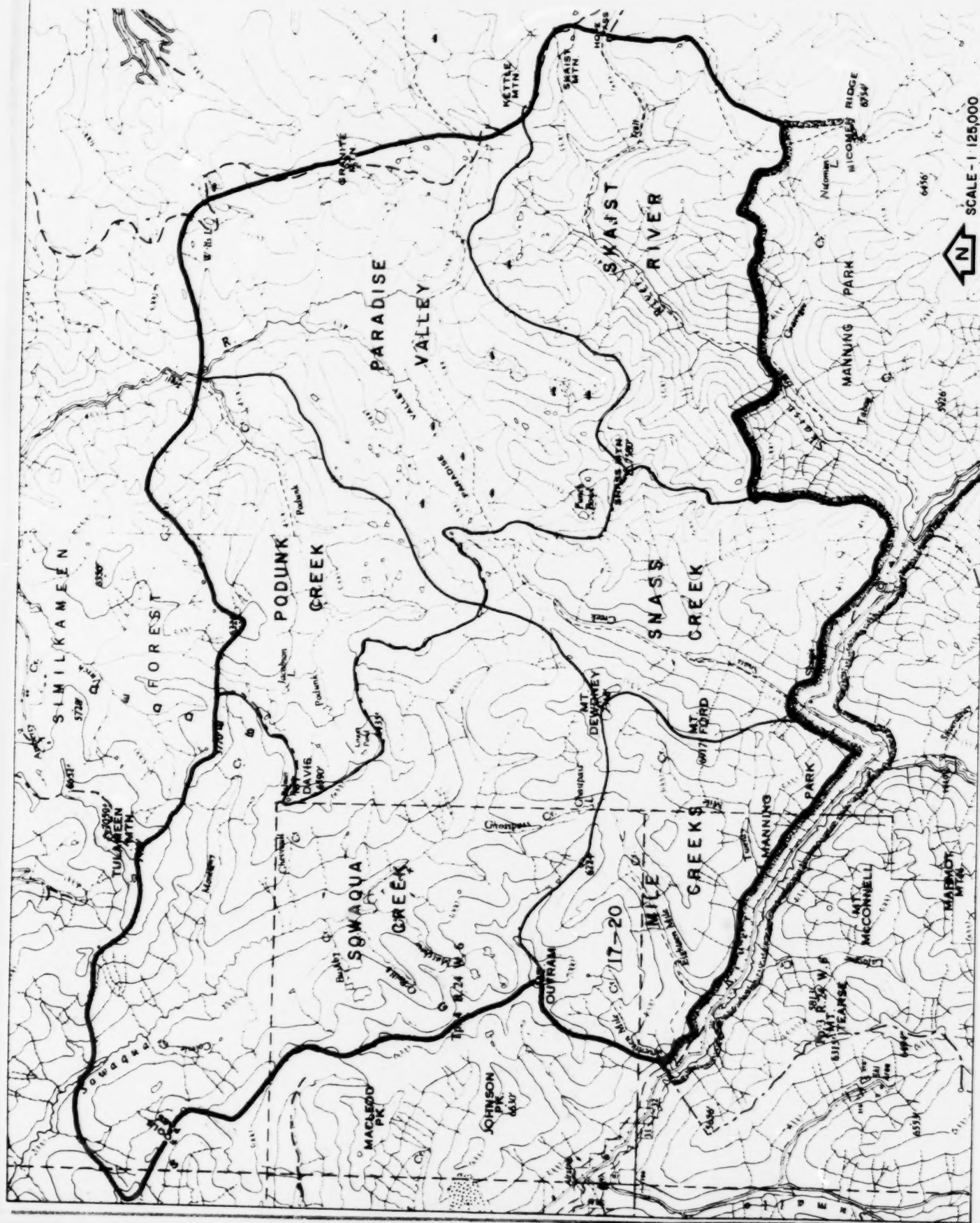
In sections 3.5.5 through 3.5.10 which follow, the assessment by the Parks and Outdoor Recreation Division of the recreational features of each drainage is outlined first, followed by the analysis of the Ministry of Forests Recreation Branch.

3.5.2 Present Recreational Use

The Parks and Outdoor Recreation Division notes that, although no user studies have been conducted on the area, discussions with user groups and individuals indicate existing active participation in hiking, backpacking, riding, hunting and snowmobiling. Climbing, nordic skiing, and nature study are secondary activities.

The Paradise Valley area, accessible on foot by the Dewdney and Hope Pass Trails, probably receives the most direct active use with the 17 Mile-20 Mile Creek area receiving the most indirect, scenic use. Based on use figures

Figure 15 - MAJOR DRAINAGES OF THE CASCADE WILDERNESS STUDY AREA



in Manning Park, total recreation visitation for the area would be approximately 1500 visitor days. Additionally, the booklet published by the Okanagan Similkameen Parks Society, Old Pack Trails in the Proposed Cascade Wilderness, has sold 5300 copies, indicating substantial public interest in the area. Published reports have also appeared in various outdoor magazines.

It is also worth noting that with the exception of the Dogwood Bikeway on Vancouver Island, this proposal has received more public support than has any other Provincial Park proposal.

Primary recreational use of the area to date has been by horse riders, guide outfitters and hunters. Hikers, backpackers and the occasional mountaineering party have also visited the area. Recreation here has been traditionally wilderness experience related sports. Other recreation opportunities have been limited due to rugged topography, poor access and lack of desirable recreation features such as lakes and streams. A recent program of signing for highway accesses, highway roads, trailheads and trails has served to substantially correct the lack of publicity regarding the historic trails; some fifty (50) signs have been produced including six (6) Highways signs and four (4) marking trailheads near areas accessible by car. The historic trails are now as well signed as any in the Province.

3.5.3 Visual Inventory

A visual inventory of the Cascade Wilderness Study area was undertaken by the Ministry of Forests Recreation Branch. This inventory delineated broad types of viewing opportunities within the study area. View types were identified - panoramas, for example, and canopied and enclosed views - and rated for their quality. Within the view types, visual features - landforms, rockforms, vegetation patterns and water features - were identified and rated for their contribution to the view quality.

In general, viewing opportunities available from mountains and ridges were considered significant as were openings in the forest canopy on the valley bottoms which permitted good views of the surrounding mountains. The forest itself was identified as an important visual feature both as an element in panoramic views (upper Sowaqua, Eighteen Mile, and the upper Paradise Valley) and in small, enclosed or canopied views (lower part of the Dewdney, Outram, and Ghostpass Trails).

Visual Inventory maps for each of the Vancouver and Kamloops Forest Regions have been prepared. Viewing can be arranged by contacting the Ministry of Forests office in Princeton or Vancouver (Recreation Section).

3.5.4 Climatic Suitability

Weather, being a key element of the physical environment, determines what recreation activities can occur, when and how they are enjoyed. The Cascade Wilderness Study area, because it lies in a climatic transitional zone, receives weather patterns influenced by both the coast and interior.

To assess the climatic suitability for outdoor recreation in this area, the publication "Climatic Suitability for Recreation in British Columbia" (Bennett 1977) was employed.

Because of the lack of weather stations within the study area,

climatic information collected for Hope and Princeton was used.

Climatic suitability ratings for these sites indicates that the study area has potentially good summers and suitable winters for outdoor recreation activities. The summers are warm (12° to 16° C) with low precipitation. This is ideal weather for activities such as hiking, horse riding, climbing and camping. The winters are cool (-4° to -8° C) with reasonably high precipitation. During cold weather this precipitation is usually in the form of snow. These conditions provide for diverse winter recreation activities such as snowmobiling, cross-country and snowshoeing (Table 4).

Table 4 AVERAGE NUMBER OF DAYS WITH SNOW DEPTH GREATER THAN 2.5cm.
OVER 20 YEAR PERIOD

	Average	Minimum	Maximum
HOPE	47	12	85
PRINCETON	120	78	147

(Source: Bennett 1977)

3.5.5 Sowaqua Creek

Parks and Outdoor Recreation Division

The Sowaqua Creek drainage comprises a relatively large portion of the proposal. Due to a fire that swept through most of the upper mid-section of the valley in 1938, only the lower third of this predominantly Coastal Western Hemlock forest has ever been logged. The valley is deep and somewhat 'U' shaped, and drains northeast to flow into the Coquihalla River at a point about sixteen kilometres from Hope.

The park and recreational appeal of the Sowaqua centers around the fifteen kilometres of the 1849 Hudson's Bay Company Brigade Trail located diagonally across the middle section of the valley. The surrounding mountains and several small lakes forming Bushby

and Matthew Creeks are of climbing interest. Camping opportunities exist at Campement du Chevreuil, the second encampment on the Hudson's Bay Company Brigade Trail from Fort Hope, and at Ghostpass Lake (Figure 16).

Ministry of Forests/Recreation Branch

The main recreation feature of the Sowaqua Creek drainage is the Hudson's Bay Company Brigade Trail (1849-61), located diagonally across the valley from Manson's Ridge and Fool's Pass to Mt. Davis. This trail, of historical interest and value, has been cleared and is suitable for hiking, backpacking and horseback riding. It is long and strenuous covering 8-10 miles of rough terrain. Numerous areas for overnight camping are located along the trail with the best campsite (Campement du Chevreuil) located high on Mt. Davis.

While the Sowaqua Creek drainage contains several sites worthy of Forest Service development, road access is considered necessary before any development would occur.

Sowaqua Creek was stocked in August 1980 with 40,000 steelhead fry by the B. C. Fish and Wildlife Branch. This suggests future angling opportunities.

Although the alpine areas of Mounts Outram, Dewdney and Tulameen provide good hiking and mountaineering opportunities and are relatively aesthetic, they are not unique or outstanding on a regional basis.

The remaining area, much of which was swept over by fire in 1938, is too steep, rugged and in places, vegetated to provide much quality recreation opportunity. Much of the south facing side of the Sowaqua Valley is still very poorly forested.

Recreation activities available in this area include hiking, angling, camping, horseback riding, climbing, hunting and wildlife viewing. Present use of this area as a whole is generally low.

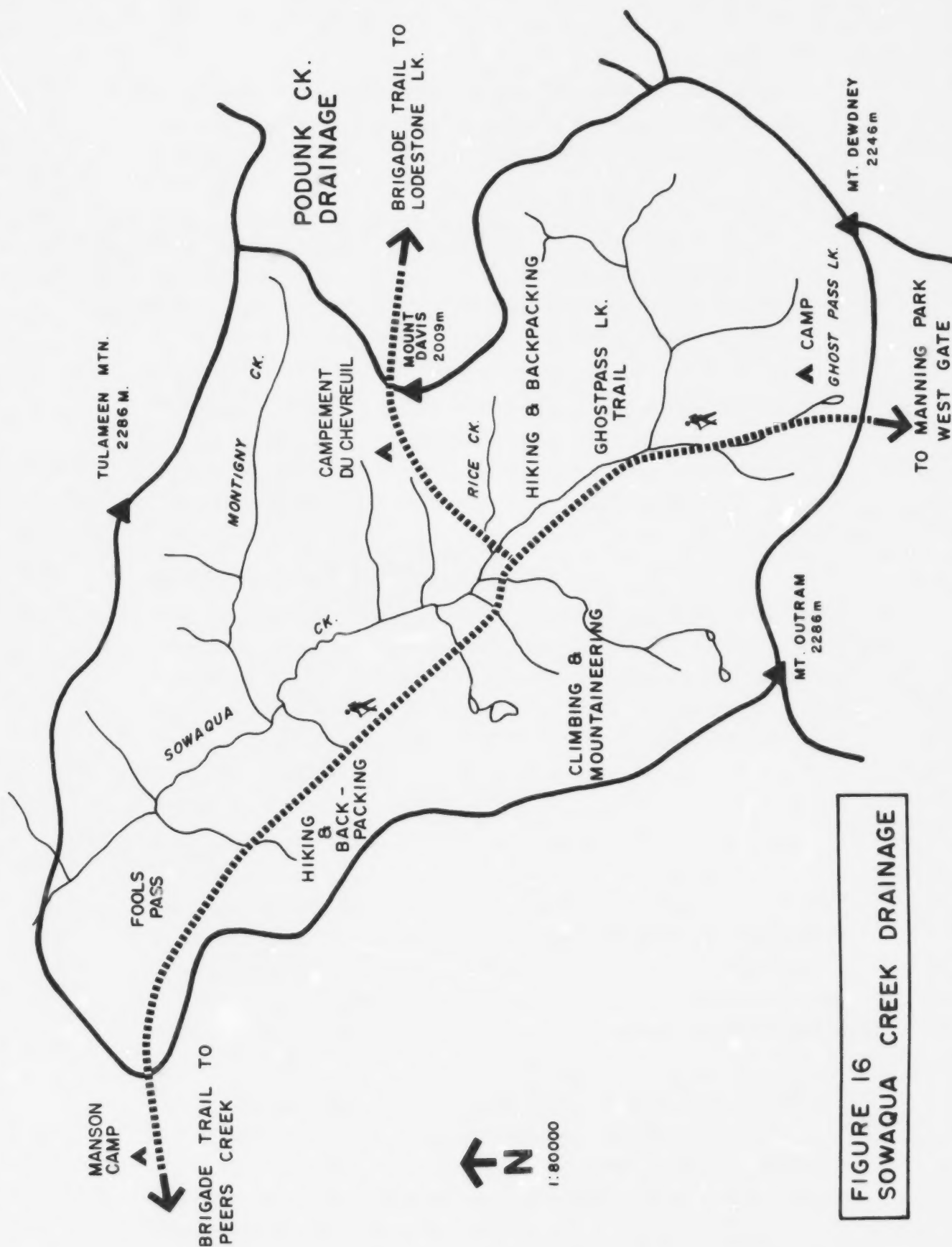


FIGURE 16
SOWAQUA CREEK DRAINAGE

In summary, the significant recreation features are the Hudson's Bay Company Brigade Trail and the alpine areas of Mounts Outram, Dewdney and Tulameen. Other than this, the area has limited recreational opportunities.

3.5.6 Seventeen-Twenty (17-20) Mile Creeks
Parks and Outdoor Recreation Division

This portion of the study area, lying between the Manning Park boundary and the height of land stretching from Mt. Outram to Mt. Ford, is representative of both the Coastal Western Hemlock and the subalpine Mountain Hemlock zones.

Its value lies in the scenic corridor it provides from the west gate of Manning Park, the dramatic peaks of Mount Outram and the southern flanks of Mount Ford, Ghostpass Lake, and the two dominant trails leading to Mount Outram and Ghostpass Lake (Figure 17).

Ministry of Forests/Recreation Branch

This area, located in the southwest corner of the study area, lies between the Manning Park "panhandle" and the height of land stretching from Mt. Outram to Mt. Ford. It contains two noteworthy trails, Ghostpass Trail and Mt. Outram Trail. The starts of these trails are currently managed by the Parks and Outdoor Recreation Division. Both trails are in good condition and are suitable for hiking.

Ghostpass Trail, starting within Manning Park along Highway 3, follows Eighteen Mile Creek, fading out about 1.5 km south of the pass. The route, however, from here to the pass is easily followed. This trail historically joined the Hudson's Bay Company Brigade Trail at Sowaqua Creek to the Dewdney Trail at Eighteen Mile Creek. It is presently non-existent between Sowaqua Creek and Ghostpass Lake. Ghostpass Trail provides the best access to an ascent of Mount Dewdney.

The Mt. Outram Trail follows a ridge east of Seventeen Mile Creek and is well marked and in good condition. The alpine area near the end of the trail is well worth the rigorous hike required to reach it and contains a good campsite beside a small pond. The trail ends at the peak of Mt. Outram.

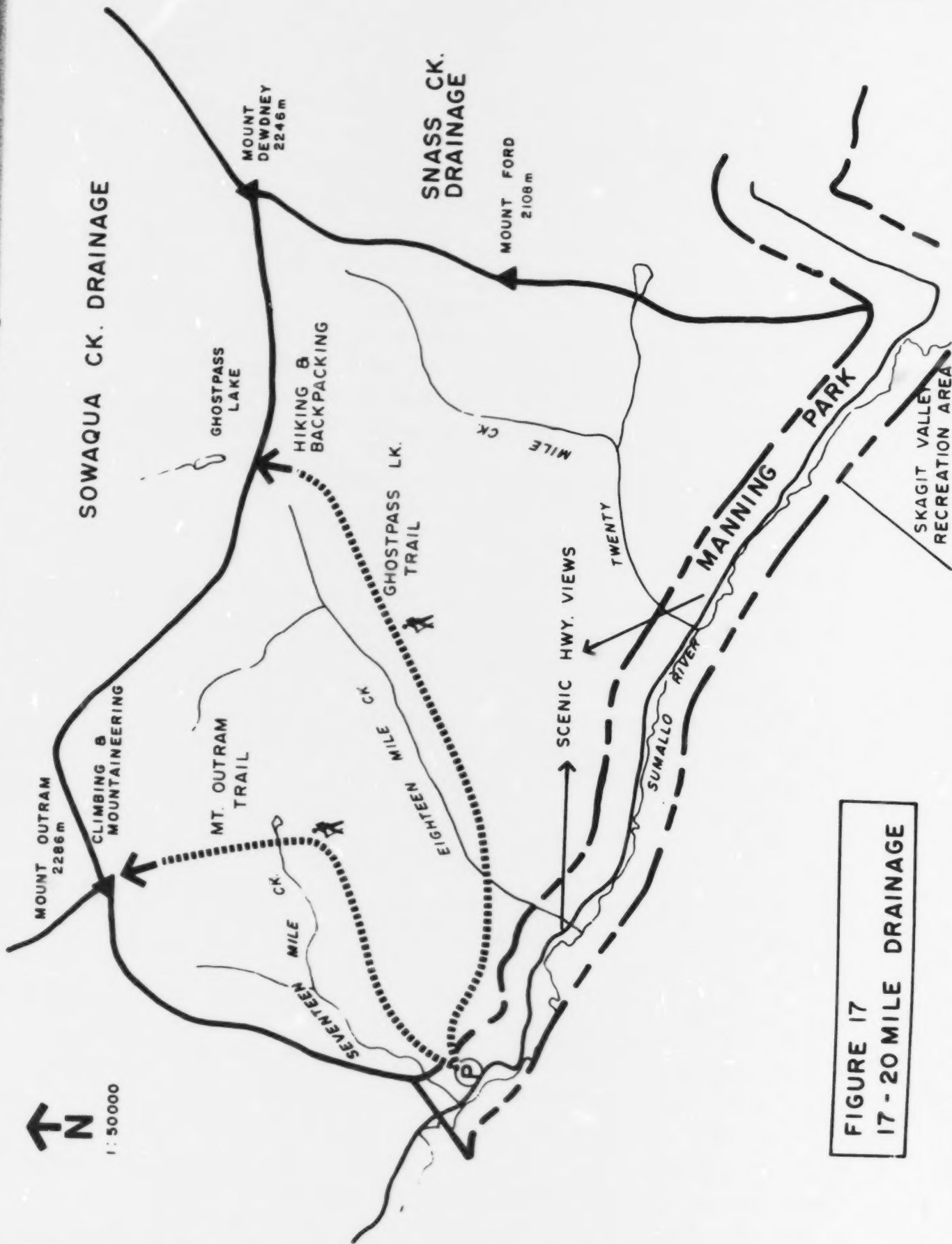


FIGURE 17
17 - 20 MILE DRAINAGE

In summary, the significant recreation features are Ghostpass Trail and Lake, the Mt. Outram Trail and the alpine areas of Mounts Dewdney, Ford and Outram. The remaining areas are steep and forested with limited recreation capabilities.

3.5.7 Snass Creek

Parks and Outdoor Recreation Division

The Snass Creek portion, following south from Paradise Valley to the Skagit River, is representative of the Coastal Western Hemlock biogeoclimatic zone. Laced with avalanche paths and talus slopes, the drainage encompasses both the 1860 Dewdney Trail and the 1858 Whatcom Trail (Figure 18).

The park and outdoor recreation values in Snass Creek focus on the undisturbed valley and the presence of two historic trails. An added value is the variety of vegetation and wildlife associated with the natural openings created by both avalanches and colluvial action at the upper end of the valley. Mature coastal forest is interrupted by unusual groves of stinging nettle, coupled with cow parsnip and slide alder, presenting excellent views of surrounding Mount Dewdney and Mount Ford. Talus slopes are alive with marmots and rock rabbits offering excellent opportunities for viewing small mammals. Another interesting feature is the unusual underground disappearance of Snass Creek above Dry Lake due to the overlapping colluvial slopes in the valley bottom.

Ministry of Forests/Recreation Branch

Of primary importance for recreation in this area are the historic trails, access to Paradise Valley and the alpine areas of Snass Mountain.

The Dewdney Trail provides ideal family hiking, good horseback riding, historic interpretation, excellent access to Paradise Valley and good viewing as well. It may also provide excellent cross-country skiing if the avalanche danger is not too severe and appropriate safety precautions are undertaken.

The lower portion of this trail - the first 2.2 kilometres - because of close proximity to the highway, contains high recreational values in flat terrain and mature forests. It would also be the

area most heavily visited by the public.

The Whatcom Trail, in its present state, has limited recreational values other than historical interest. It is difficult to find as neither end of the trail between Snass Mountain and the Dewdney Trail is evident. It has a rugged alignment climbing some 900 metres through avalanche chute terrain to the pass at the head of the east fork of Snass Creek.

The alpine areas of Snass Mountain offer hiking, mountaineering, viewing and some dispersed camping.

The area, at present, does not receive high use. Only within the last few years has the trail (Dewdney) been brushed out, and cleared of deadfalls. The primary use has been made by horse riders, guide/outfitters and hunters. Hikers, backpackers and the occasional mountaineering party have also visited the area.

In summary, the significant recreation features are the Dewdney and Whatcom Trails, the southern forested flats close to the highway and the alpine areas of Dewdney, Snass and Ford Mountains.

This area has the potential to become relatively popular for family hiking and backpacking. The historic trails, scenic surroundings, gentle trail gradient, and worthwhile objectives of Paradise Valley and Snass Mountain combine to give high recreation values resulting in high user satisfaction.

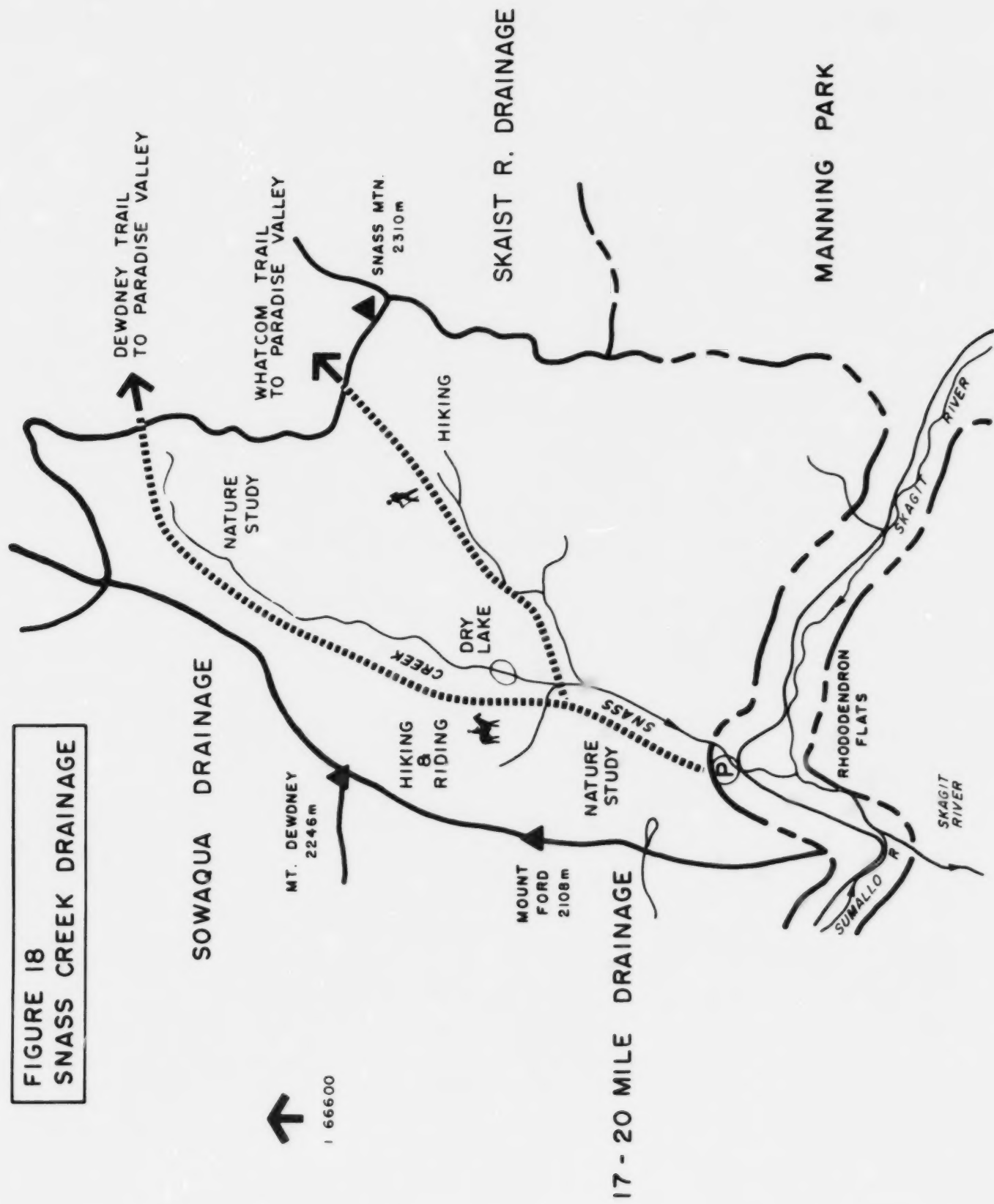
3.5.8 Podunk Creek

Parks and Outdoor Recreation Division

Podunk Creek, flowing through a relatively open high valley to the northeast of Paradise Valley, forms a major tributary of the Tulameen River. The valley is representative of the Engelmann Spruce-Subalpine Fir zone, and offers limited high elevation Cascade valley-meadow landscapes.

Tulameen Mountain, Jacobsen Lake, Conglomerate Flats and Palmer Pond act as focal points in the Valley, with the pre-colonial Hudson's Bay Company Brigade Trail of 1849 following the entire

FIGURE 18
SNASS CREEK DRAINAGE



length of the valley. A cabin was constructed by snowmobilers at the junction of the Hudson's Bay Company and Vuich Trails and is available for public use (Figure 19).

Podunk Creek offers many of the same recreation opportunities as those found in Paradise Valley.

Ministry of Forests/Recreation Branch

Access to Podunk Creek is possible by either the northwest or the east along the historic Hudson's Bay Company Brigade Trail. The hiking trail follows the creek and offers views of mountain peaks to the north and south. The creek meanders slowly to the Tulameen River and has a variety of open areas and sandy sections with numerous campsite locations.

Jacobsen Lake is a minor feature with limited recreational opportunities on the backshore. Much of the area adjacent to the lake is boggy in summer. The vegetative variety in the drainage provides opportunities for horse grazing, nature study, hunting and viewing. The low mountain ridges to the south provide opportunities for mountaineering, hiking, viewing and angling in the small lakes.

In summary, the significant recreation features are the Hudson's Bay Company Brigade Trail and the alpine area of Mt. Davis. On a regional scale, the Podunk Creek drainage has a low recreational significance, as many of its features are common elsewhere in the Kamloops Forest Region. The recreational value of the H.B.C. Brigade Trail is of moderate significance as this section of the trail is located in an isolated part of the proposal area and is relatively undisturbed by current access development.

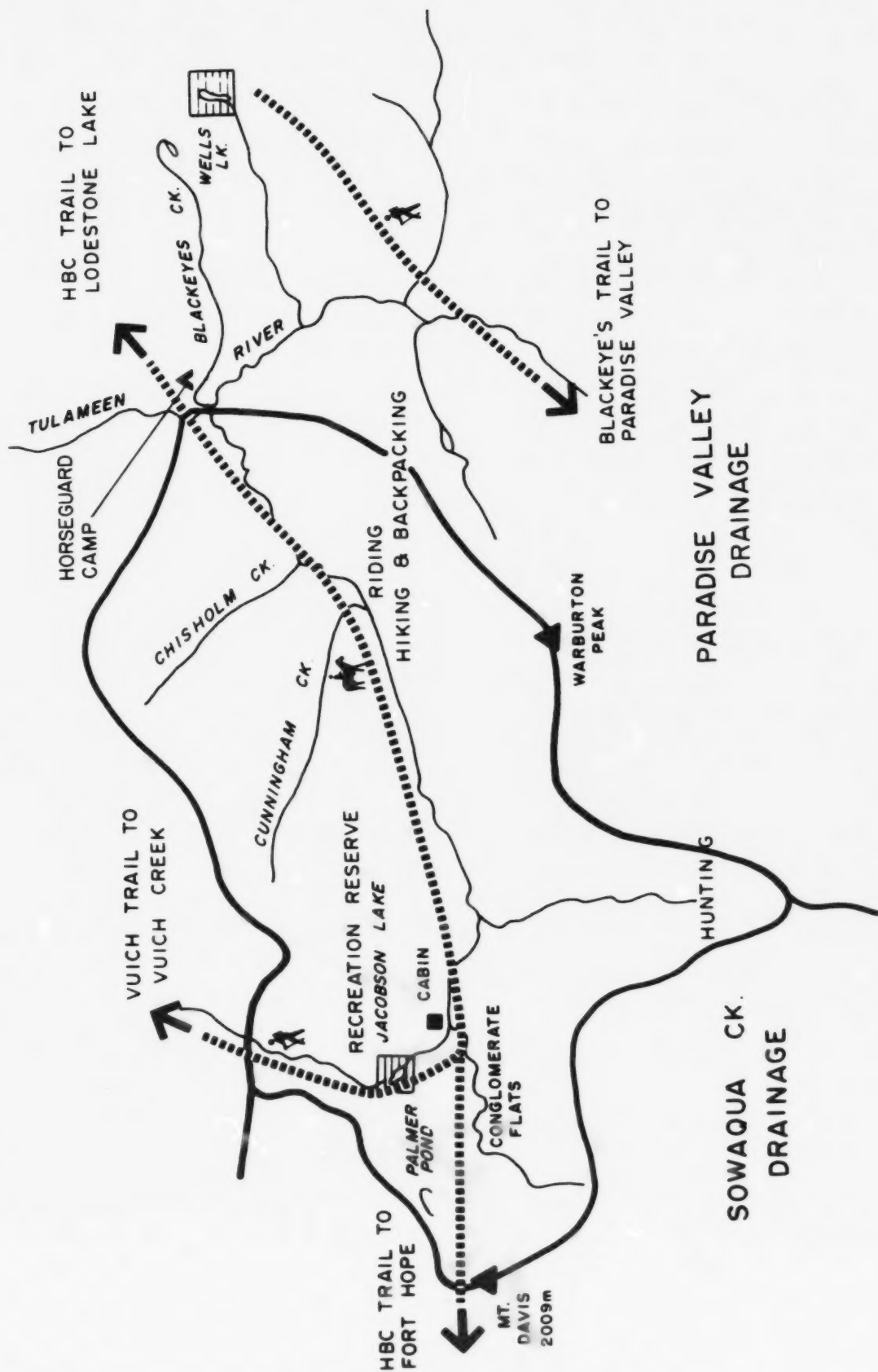
3.5.9 Paradise Valley

Parks and Outdoor Recreation Division

This portion of the study area includes the Paradise Valley section of the headwaters of the Tulameen River. The upper valley, upstream from Holding Creek, is representative of the Engelmann Spruce-Subalpine Fir biogeoclimatic zone, and offers a high elevation, Cascade valley-meadow landscape not found in Manning Park.

FIGURE 19
PODUNK CREEK DRAINAGE

↑ N
1:72000



The park and outdoor recreation values in this area are high. Wells Lake, Punchbowl Lake and Bruce Lake are focal areas not only from a historic or recreational basis, but also from and as a wildlife viewpoint. Several extensive grass and sedge meadows exist along the Tulameen River as well as at the headwaters of Hubbard and Holding Creeks and at the base of Warburton Peak. Snass Mountain, Warburton Peak and Granite Mountain dominate the skyline.

These features, in combination with this historic Dewdney, Whatcom and Blackeye's Trails, provide excellent opportunities for climbing, camping, hiking, riding, hunting, backpacking, snowmobiling, nordic skiing and nature study in the North Cascade Mountains (Figure 20).

Ministry of Forests Recreation Branch

Upper Paradise Valley is the headwaters of the Tulameen River. Access from the west is by Dewdney trail up the Snass Creek from Highway #3 or by the four-wheel roads mentioned in Section 2.2.

Paradise Valley is a broad high elevation valley bottom with subalpine open meadow vegetation types. The landscape rises gently north of the valley bottom to a series of shallow ridges and meadows with small lakes. The mountainous peaks and ridges to the south rise sharply, parallel to Paradise Valley. Deep trenching has formed sharp ridges which drain to the valley bottom. Small glacial lakes and meadows are found within the draws. To the northeast the valley becomes heavily forested and broadens to the Tulameen River and Hubbard Creek drainages. The major features visible from Paradise Valley are the mountain peaks and alpine valleys characterized by forest parkland on the lower slopes. The rock features are unspectacular, yet attractive to the recreationalist.

Recreation opportunities in this drainage are varied. The Historic Dewdney and Whatcom Trails follow the valley. The historic trails offer hiking, horseback riding and historic study opportunities.

The access from the east provides for four-wheel drive and snowmobiling in the Skaist Mountain-Wells Lake area. Hiking and climbing are possible on the ridges to the south of the valley. Dispersed camping is possible in many areas along the valley. Trail conditions are generally good due to high use by horse-pack outfitters.

The Paradise Valley has significant recreation value on a regional basis. The varied recreation opportunities, historic values and topographic features generally rate the valley as a moderately significant attraction to the recreationalist. The trail length and side trip opportunities provide for extended trip planning. Vegetative variety and access to the alpine ridges and peaks increases the recreation value of this drainage.

In summary, the significant recreation features are the subalpine Paradise Valley meadows, Punch Bowl Lake, the subalpine meadows and ponds in the Granite Mountain area, the Whatcom, Dewdney and Blackeye's Trails and an abundance of camping area and suitable terrain for cross-country skiing. The Paradise Valley drainage contains the most attractive recreational features of the study area.

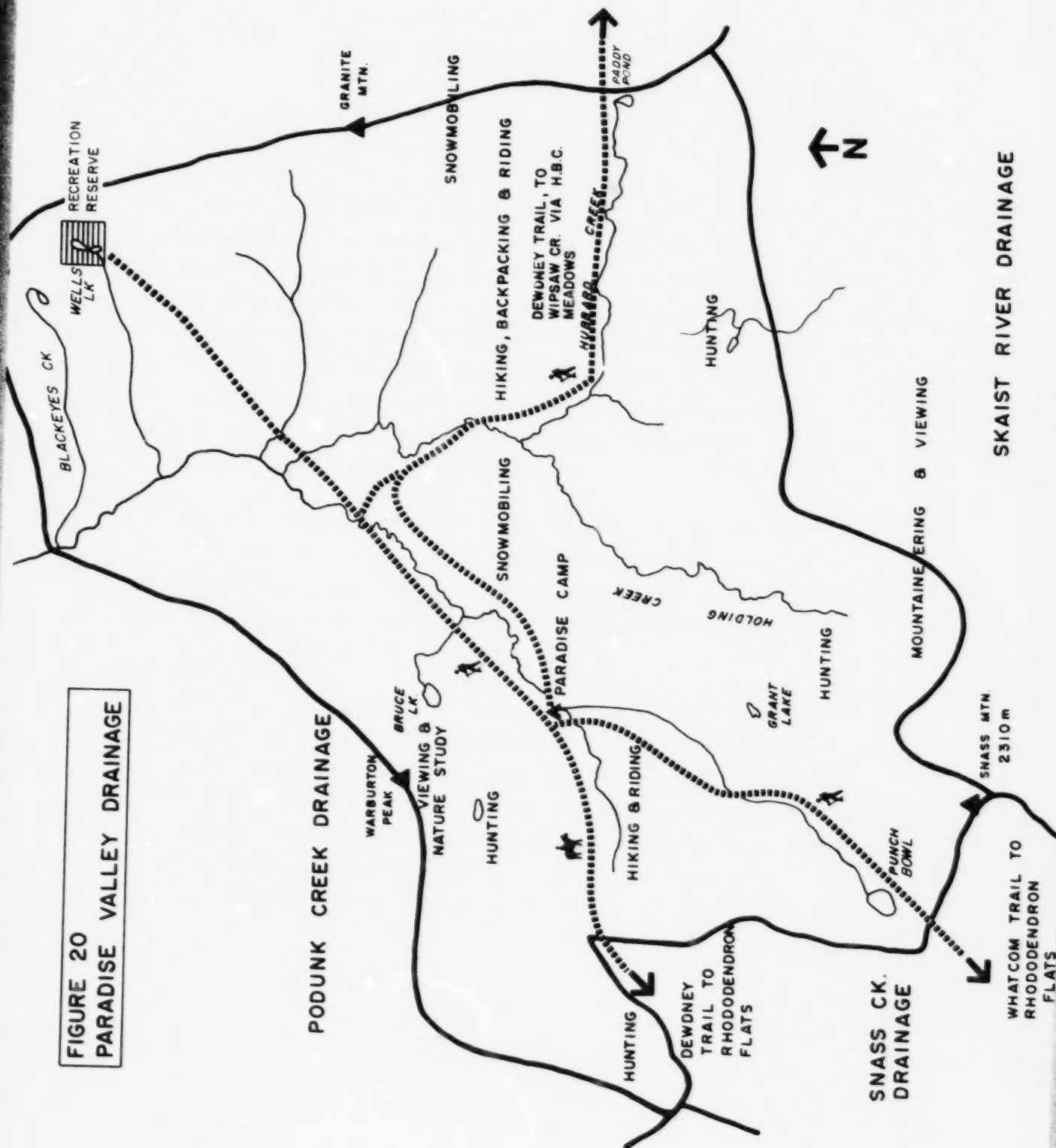
3.5.10 Skaist River

Parks and Outdoor Recreation Division

This portion of the study area includes all lands drained by the Skaist River, from its entrance into the panhandle of Manning Park to its headwaters at Hope Pass. The deeply incised valley is representative of the coastal Western Hemlock zone at its lower elevations, grading to Engelmann Spruce-Subalpine Fir at Hope Pass. The Hope Pass, or Captain Grant's Trail, initially constructed in 1861 and 1862, winds its way along the river (Figure 21).

The park and outdoor recreation values associated with this drainage centre primarily upon the scenic natural, undisturbed state of the valley, the subalpine meadows of Skaist and Kettle Mountains and the historic Hope Pass Trail. In addition, at Hope

FIGURE 20
PARADISE VALLEY DRAINAGE



Pass the Hope Trail intersects and follows the Nicomen Ridge skyline south from Hope Pass to Nicomen Lake Camp in Manning Park and north from Hope Pass to the intersection with the Dewdney Trail at the Hubbard/Granite Creek Divide.

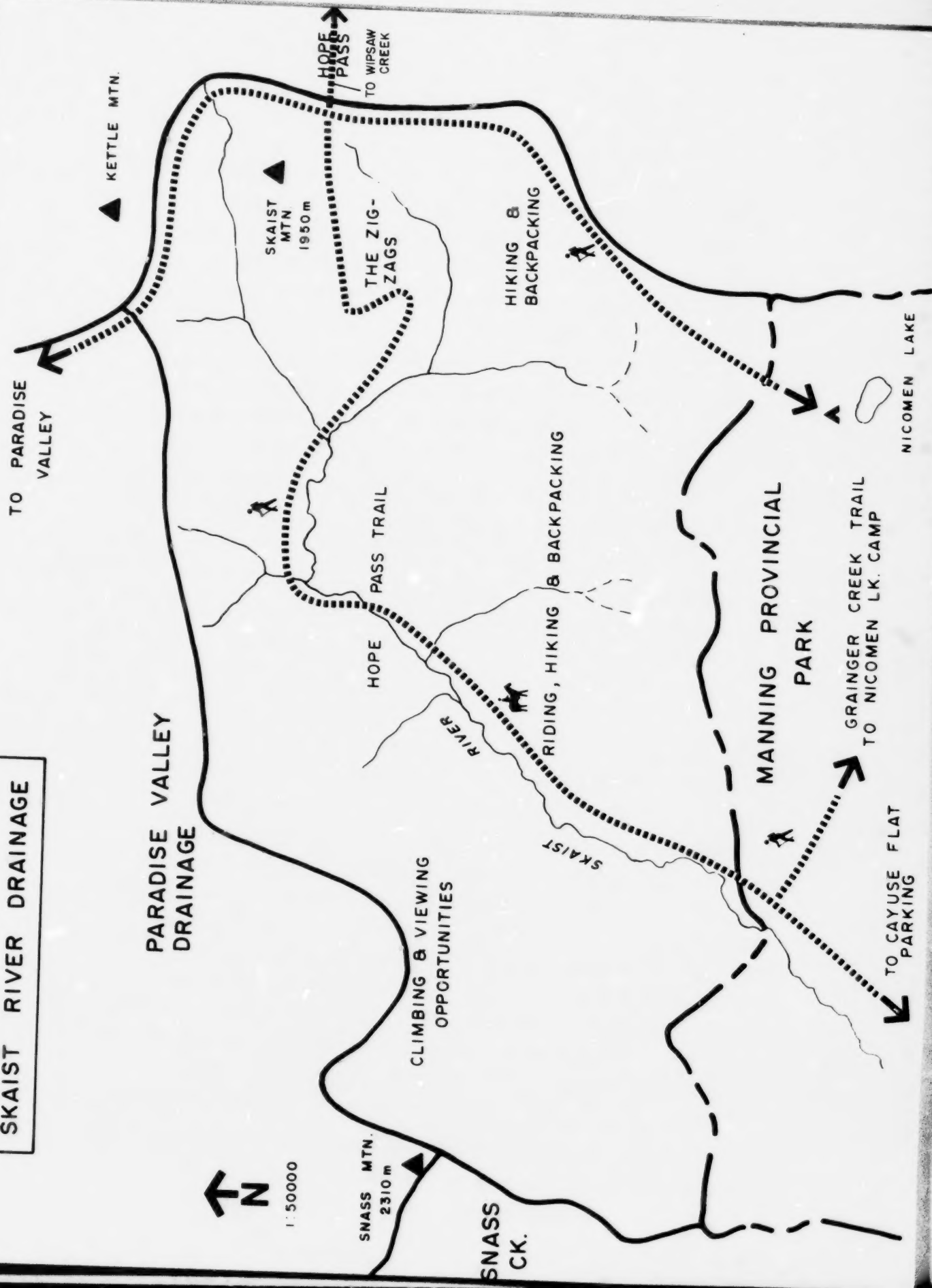
Ministry of Forests Recreation Branch

The Skaist River drainage is a steeply cut valley with the headwaters at Hope Pass. Access to the drainage is off a gravel road up Whipsaw Creek to a point approximately 2 kilometres east of Hope Pass and from the Hope-Princeton Highway #3 to the south. A number of talus slopes and avalanche paths run into the valley bottom. The river curves sharply onto a series of terraces at which point it meanders before dropping steeply again. Most of the drainage is heavily forested.

The historic Hope Pass Trail runs parallel to the drainage and provides hiking and horseback riding opportunities. Other recreational opportunities along the trail are limited by steep topography. More diverse recreation activities are possible once in sub-alpine at Hope Pass.

In summary, this historic Hope Pass Trail is the significant feature of the drainage providing for hiking and horseback riding opportunities. The Skaist drainage serves primarily as a linear access corridor from the eastern boundary of the study area. There is viewing potential from some ridges and peaks along the trail. The steep topography contributes to low significance for recreation on a regional basis of this drainage.

Figure 21
SKAIST RIVER DRAINAGE



3.5.11 Summary

In its entirety, the Cascade Wilderness Study area straddles both the Cascade Mountain and South Coast Mountain Natural Landscape Regions as defined in the Parks and Outdoor Recreation Division's Natural Landscape Regions of British Columbia.

With respect to the goals and objectives of the Parks and Outdoor Recreation Division, portions of the Cascade Wilderness Study area adequately provide significant park and recreation values in the North Cascade Mountains:

A. *To protect, exhibit, and interpret representative and outstanding elements of the natural features and heritage of British Columbia.*

The study area encompasses portions of British Columbia's heritage trails, three of which are in Paradise Valley. In addition, Paradise Valley is a unique concave, sub-alpine landscape in British Columbia's North Cascade Mountains, a landscape not now represented in Manning Park.

B. *To provide park related recreation opportunities and encourage the provision of a diverse set of outdoor recreation opportunities with other agencies and groups.*

The provision of high elevation horse trails is currently a rarity in the Canadian component of the North Cascade Mountains because of the rugged nature of the topography, specifically in Manning Park. Although the existing historic trail systems in the study area were developed for horse and hiker use originally, only the Dewdney and the Hope Pass Trails would, in reality, be suitable for these uses. Their connecting nature makes an ideal three-day loop system from Cayuse Flats in Manning Park. The area is also attractive for other uses such as backpacking, nature study, hiking, snowmobiling, photography and hunting.

C. *To assist and encourage tourism development in British Columbia as it relates to the park system and complementary private and public sector responsibilities.*

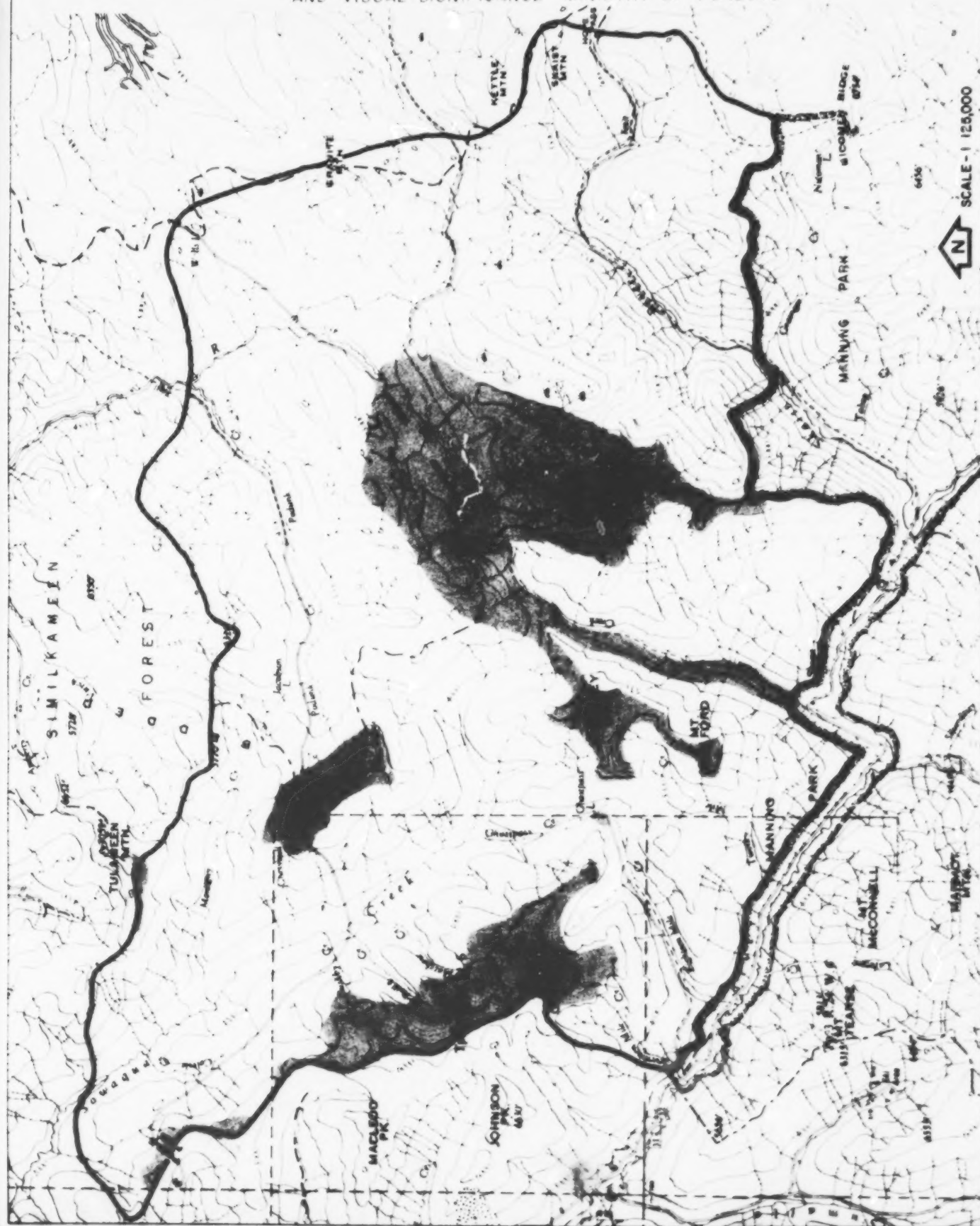
The riding opportunities presented by the historic Dewdney and Hope Pass Trails, in association with the naturalness of the area, make this area ideal for a riding concession.

The Recreation Branch of the Ministry of Forests considers the Cascade Wilderness Study area, as a whole, to have moderate recreational capability with specific areas rating much higher capability. The historic trails combined with scenic landscapes provide a high quality and unique experience. Few areas have as many historic trails, nor ones that are in as good a condition.

Some of the recreation activities available in this area include hiking, backpacking, horseback riding, camping, mountaineering, cross-country skiing and historical interpretation. The profusion of fauna in the area provides excellent opportunities for recreational hunting and wildlife viewing.

The following map (Figure 22) shows the areas and historic trails of high recreational and visual significance in the Cascade Wilderness Study area, as determined by the Ministry of Forests Recreation Branch.

Figure 22 AREAS AND HISTORIC TRAILS OF HIGH RECREATIONAL AND VISUAL SIGNIFICANCE MINISTRY OF FORESTS



3.6 Grazing

Grazing permits currently exist for the Kamloops Forest Region only. At present, 629 cattle use the study area from as early as June 1 to as late as October 31. The present use on the study area is 1209 AUMs (Animal Unit Months). The permittees using the area include Princeton Stock Ranch Ltd. and Mr. L. G. Maynard. (In addition some stock drift onto the area from permittees to the North)

No horses are currently under permit nor have been during the past ten years.

It is estimated by the Ministry of Forests, Kamloops, that there are some 5219 hectares of usable range within the study area with a carrying capacity for, conservatively speaking, 2144 AUMs (Figure 23).

This is a detailed topographic map of the Manning Park region in British Columbia, Canada. The map features the Manning River flowing through the center, with Manning Park situated along its banks. Key geographical features include several mountain peaks: Tulareen Mtn (7090'), Mt. Ford (6917'), Mt. Dewdney (7168'), Mt. Snass (7160'), Mt. Kettle, and Mt. Marmot. The Similkameen Forest is shown to the west of the river. The map also depicts various lakes such as Williams Lake, Manning Lake, and several smaller ones like Marmot, Johnson, and MacLeod. Trails are marked with dashed lines, and numerous elevation points are indicated throughout the terrain. A scale bar at the bottom right shows a scale of 1:25,000, and a north arrow is located in the bottom right corner.



3.7 Soils

A description of the soils, surficial geology and associated landscape and vegetation features of the Cascade Wilderness Study area is the subject of the Cascade Soil Survey (Vold and Daykin, 1980) prepared by the Terrestrial Studies Branch of the B. C. Ministry of Environment. This report, published under separate cover by the Ministry of Environment, presents the distribution of each soil type on a 1:100,000 scale map and provides soil interpretations for a variety of land uses including forestry, agriculture (grazing), engineering, wildlife, recreation and visual resources. These interpretations are a valuable aid to the upcoming decision on the designation and management of lands and resources in the study area.

The importance of soil as a resource is best stated in the introduction to the Cascade Soil Survey:

"Soil is an important resource for several reasons. All renewable resources are in some way dependent upon soil, which is basically a non-renewable resource due to the very slow rate at which it develops. This fact necessitates conservation of this basic resource in order to maintain optimum yields of timber, wildlife, water, recreation, forage and agricultural crops. Soils are also useful in predicting the natural productivity of these renewable resources, and their response to management.

Although soil refers to the material immediately below the earth's surface, it directly influences the kinds of plants that grow on a site, and the rate at which these plants grow. Thus, the identification of relatively homogeneous soil types provide a framework for the identification of vegetation and ecosystem types, habitats for wildlife, and for the growth characteristics (productivity) of commercial forests.

The engineering properties of soils and surficial materials are another important feature of the survey. The survey depicts limitations for roads, sources of aggregate (sand and gravel), and indicates the potential susceptibility of soils to surface erosion. This information is useful since considerable financial savings can result if the most appropriate route and soil materials are utilized for road construction".¹

¹ Vold, T. and Daykin, P., 1981. Cascade Soil Survey

3.8 Fish and Wildlife

Very generalized information only is available on wildlife in the Cascade Wilderness Study area. Existing Fish and Wildlife Branch material, wildlife ranges observed and sightings recorded during field trips made into the study area in the summer of 1980 and previously existing reports indicate that this area contains a plentiful and diverse number of mammals and birds.

Mountain goats (Oreamnos americanus americanus) were observed clinging to the rocky walls of Mount Outram while large mule deer (Odocoileus hemionus hemionus) were spotted grazing and resting on the grassy slopes of Mount Dewdney. Pika were observed in the scree slopes of the upper Snass and whistling marmots (Marmota caligata) were viewed on most of the high alpine ridges. Black bear signs in the form of scats and scratched trees were observed throughout most of the study area. Previous reports speak of beaver, wolf, coyote, elk and moose also existing in this area. In addition, grizzly bear and cougar are believed to occur within the boundaries of the study area. Trapping records show that marten, squirrel, fisher, weasel, mink, wolverine, muskrat and lynx are also present.

Upland birds such as the ruffed (Bonasa umbellus), spruce (Canachites canadensis) and blue (Dendragapus obscurus) grouse are known to reside throughout most of the area. Ptarmigans and wild pigeons have been sighted along practically all of the rocky ridges and mountain peaks. The presence of owls was most apparent in the valley bottoms. The area also supports the Canada jay (Perisoreus canadensis) and many other song birds.

Fishery values in the study area are limited. The Tulameen River through Paradise Valley and the south fork tributary, as well as Podunk Creek, support a resident rainbow trout population. Wells Lake supports a rainbow trout fishery with natural reproduction occurring in streams tributary to the lake.

Sowaqua Creek was recently stocked with 40 000 steelhead fry by the Fish and Wildlife Branch. Punch Bowl is reported to support fish although this has not been verified by the Fish and Wildlife Branch. There are other lakes in the study area that have not been studied; whether or not these lakes have potential to support a fishery has not been determined. There are also plans to provide fish passage over the dam at Nighthawk (U.S.A.) and once this occurs, salmon will have access to the upper reaches of the Tulameen, possibly up into the study area.

Most of the study area has no capability for waterfowl. The wet subalpine meadows in the Paradise Valley area have a very low capability indicating very limited waterfowl use.

4.0 AGENCY CONCERNS / RECOMMENDATIONS

4.0 AGENCY CONCERNS/RECOMMENDATIONS

In assessing and documenting the resource values of the Cascade Wilderness Study area, several Provincial government agencies took the opportunity to present concerns and/or recommendations regarding future decisions on the designation and management of lands and resources in the study area. These are presented below by agency as forwarded to the study coordinator.

4.1 Ministry of Forests

4.1.1 Timber

The west and east halves of the study area fall within the boundaries of the Vancouver and the Kamloops Forest Regions respectively. The Vancouver Forest Region states that, since there is an acute timber supply shortage in the Fraser Timber Supply Area, any further alienations of the forest land base would simply accentuate this situation. The proposal to create a Wilderness Conservancy or extension to Manning Park would affect not only the forest industry but also the social stability in those communities dependent upon the forest resource. The Vancouver Forest Region therefore opposes any large-scale withdrawals which will preclude timber harvesting.

The Kamloops Forest Region states that the Regional position is to manage the area under the multiple use concept. Any single use alienation would have serious consequences to the adjacent community and to the Province as a whole. The town of Princeton would suffer from the predicted employment foregone (see Table 5, Section 3.2) and the full recreational potential would not be realized. Although the TSA analysis is incomplete, it is anticipated that the Merritt TSA would be unable to make up the timber deficit. The predicted dollar loss per year to the economy of the Province is unacceptable. The area can be managed within integrated use principles for maximum benefit to all resource users.

4.1.2 Recreation

The Recreation Branch of the Ministry of Forests states that the Dewdney Trail through the Snass Creek and Paradise Valleys, portions of the H.B.C. Brigade Trail in Sowaqua Creek, Paradise Valley Meadows and the Snass Mountain/Punchbowl Lake area are the most important and scenic recreational areas within the Cascade Wilderness Study area. Their recreational values should be protected by some means of formal management.

1. The historic trails require protection:

- a) Dewdney Trail - the historic, recreational and scenic values of this trail within the Snass Creek drainage should receive formal protection from any proposed development. Timber harvesting and its effects will significantly detract from these values. Designation of the length of the trail under the Forest Act is recommended.
- b) Hudson's Bay Company Brigade Trail - the integrity of this trail should be protected via a system similar to Circular Letter 2806 (Parks/Forest Service Joint Historic Trails Administration, E.L. Young, Chief Forester, April 3, 1974 - see Appendix I). Any road built to intersect this trail would significantly lower its aesthetic/historic/wilderness values.
- c) Whatcom, Ghostpass, Vuich, Hope Trails - should be managed jointly (along with the H.B.C. Brigade Trail) by the Forest Service and Parks Branch via a system similar to Circular Letter 2806. However, amendments should be made to formalize the memorandum, provide more explicit instructions and to express sufficient concern for the non-interpretative values of historic trails. Recognition of the aesthetic values of adjacent landscapes is necessary to make the historic/recreational trail experience an authentic and rewarding one.

2. Other important areas which require protection:

- a) Paradise Valley Meadows - the scenic and recreational values of this area should receive formal designation as a recreation site under the Forest Act.
 - b) Snass Mountain/Punch Bowl - the scenic and recreational values of this area should receive formal designation as a recreation site under the Forest Act.
3. Future management decisions for the proposal area will require input and liaison from the management agency and, in the case of that portion of the study area within the Kamloops Forest Region, will also benefit from the input of the Tulameen Public Advisory Committee, which will act on behalf of public interest groups.

4.1.3 Grazing

Domestic grazing is a current use of lands within the study area. The Ministry of Forests recognizes that the exclusion of grazing need not result from any decision currently contemplated on allocation and management of lands within the study area. Nonetheless, should such a decision be made; the Ministry anticipates that:

1. an integral portion of the forage base would be removed from two ranch operations;
2. the future potential for increased grazing use would be inhibited in the local area;
3. a need for extensive and costly fencing would arise as there are insufficient natural barriers to prevent stock movement onto the study area. The only alternative to this fencing would be to cancel grazing permits covering a very large adjacent area;
4. the present government rapport with the Princeton Stockbreeders Association would suffer.

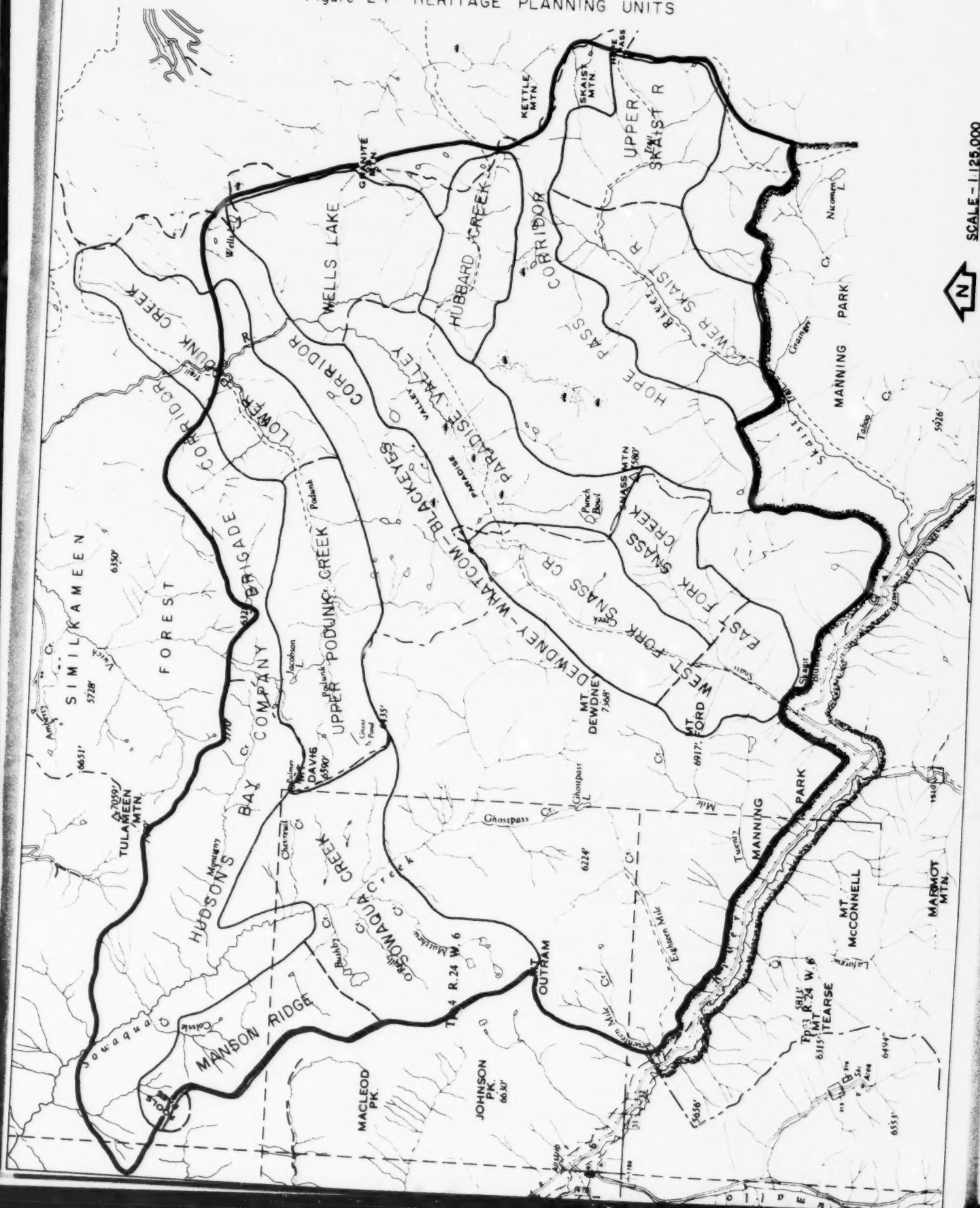
4.2 Heritage Conservation Branch

The Heritage Conservation Branch notes that it has been well established that the main heritage resources of the study area are the historic trails which traverse it. The Branch states that historic trails are recognized as one type of heritage property for which the Branch is responsible. Its goal in this respect is to identify, preserve and promote the sympathetic use of representative sections of significant historic trails in British Columbia.

The Branch suggests that, for inventory and discussion purposes, the historic trails of the study area should be looked at in three distinct groups. Both the Hudson's Bay Company Brigade Trail and the Hope Pass Trail are isolated within the study area and should be thought of as distinct units or corridors. The Dewdney Trail, Whatcom Trail and Blackeye's Trail, on the other hand, tend to overlap each other and are located in the same region of the study area. Therefore, these three trails should be thought of as a single unit or corridor.

The trail corridors can in turn be broken down into distinct subunits, referred to for convenience as heritage planning units (Figure 24). The choice of boundaries for the heritage planning units is largely based on the immediate visual horizon along any given segment of the particular trail. The setting of an historic trail, as with any heritage resource, is of importance to its full appreciation. The boundaries of the heritage planning units reflect a zone of sensitivity surrounding each particular segment of trail. An incompatible activity occurring within a particular unit would be likely to have a detrimental effect on the section of trail within that zone. The fact that the area traversed by a particular trail is essentially inaccessible except by that trail does contribute to the historical appreciation of the trail. Should parts of the area become accessible by road, this aesthetic quality would diminish. This would be especially so where a road parallels the trail, for any distance, particularly from one heritage planning unit to another, and especially so from

Figure 24: HERITAGE PLANNING UNITS



SCALE - 1:125,000

one watershed to another.

It would be useful for planning purposes to identify and rank the various levels of concern that exist for the heritage trail resource. The following list is presented in decreasing order of importance, with point 5 being considerably less important than those preceding:

1. Extant sections of significant historic trails
2. Entire line of significant historic trails
3. Area immediately adjacent to significant historic trails
4. Area defined by heritage planning units
5. Other old trails and environs

There is serious doubt as to the value of protecting extant sections in isolation from one another. The Heritage Conservation Branch tends to favour an all inclusive approach within each planning unit.

Regarding its own mandate with respect to historic trails, the existing documented guideline for dealing with historic trails is Circular Letter 2806 — Parks/Forest Service Joint Historic Trails Administration — April 3, 1974 (Appendix I) From the Branch's perspective, this agreement has the following shortfalls:

1. it does not make provision for adequate protection of sections of an historic route lacking ample visual evidence of the original tread
2. it gives no real direction to the overall strategy of the program, as there are many cases where a section of the original trail is evident yet there seems no purpose in protecting it
3. uncertainty surrounds agency responsibility in view of the establishment of the Heritage Conservation Branch (Ministry of the Provincial Secretary) and the Parks and Outdoor Recreation Division (Ministry of Lands, Parks and Housing) from what was formerly the Parks Branch

In summary, the Branch supports any move to protect the values associated with the historic trails of the Cascade Wilderness Study area. As a minimum, the Branch recommends that significant

sections of each of the five historic trails be protected. The sections of these trails contained in the Cascade Wilderness are the best representative examples of each respective trail in the province. It is strongly recommended that the maximum number of heritage planning units receive protection, and that preferably, these be contiguous for each trail corridor.

As an aid in minimizing potential impact to the heritage trail resource in the study area, the Heritage Conservation Branch offers the following guidelines:

I Ranking of heritage planning units within corridors in decreasing order of importance based on condition of extant sections of trail within each unit

HUDSON'S BAY COMPANY BRIGADE CORRIDOR

1. Manson Ridge
2. Upper Podunk Creek
3. Lower Podunk Creek
4. Sowaqua Creek

DEWDNEY - WHATCOM - BLACK EYE'S CORRIDOR

1. West Fork Snass Creek
2. Paradise Valley
3. East Fork Snass Creek
4. Hubbard Creek
5. Wells Lake

HOPE PASS CORRIDOR

1. Upper Skaist River
2. Lower Skaist River

II Ranking of potential impacts on heritage planning units in decreasing magnitude of impact

(The first two should be considered intolerable and the last three may be regarded as compatible).

1. Destruction of evidence of original trail
2. Motorized use of trail
3. Roads and other intensive development on or near line of trail such as pipelines, transmission lines, etc.

4. Skidder logging in heritage planning unit
5. High Lead logging in heritage planning unit
6. Aerial logging in heritage planning unit
7. Grazing (without mechanized support vehicles)
8. Guide outfitting
9. Nonmechanized recreational use

4.3 Ministry of Energy, Mines and Petroleum Resources

The Mineral Resources Branch of the Ministry of Energy, Mines and Petroleum Resources states that the mineral potential is sufficiently high to oppose any mineral reserve designation for the area. Mineral potential indicated by geologic environment dictates the need for on the ground assessment should any decision to withdraw the area from mining be contemplated. This assessment would include:

- Stage I (a) Silt sampling
 (b) Detailed Geological mapping
- release of information to mining industry or government follow-up, including
- Stage 2 (c) Geophysical surveys over anomalous areas
 (d) Diamond drilling if warranted

A decision could probably be made for most of the area after Stage I at the end of one field season, after samples have been processed. Specific anomalous areas, if any would require follow-up. What kind of follow-up, by whom and under what conditions would have to be carefully thought out depending upon results of Stage I.

4.4 Fish and Wildlife Branch

The Fish and Wildlife Branch insists that management options for which it is responsible be maintained within the study area. In this regard, the Branch is not opposed to any of the options identified in section 6.1 for the allocation and management of lands within the study area providing that

hunting, trapping, fishing and habitat manipulation (by the Branch) continue to be permitted activities within the area. The Branch states that this proviso cannot be emphasized strongly enough.

5.0 RECOMMENDATIONS

5.0 RECOMMENDATIONS

It is the recommendation of the status report of the Cascade Wilderness Study that the Environment and Land Use Technical Committee consider the contents of this resource evaluation and provide direction as to the type of resource emphasis and the nature of the planning program that it requires from the agencies involved.

In this regard, it is further recommended:

Steering Committee

1. That a Steering Committee be established to oversee completion of the Cascade Wilderness Study, in accordance with ELUTC direction, and that this Steering Committee be composed of regional staff and be jointly chaired by a representative of each of the Ministry of Forests and the Parks and Outdoor Recreation Division of the Ministry of Lands, Parks and Housing;
2. That, as a minimum, the Steering Committee include, in addition to the above, one representative from each of the following agencies, designated by the Deputy Minister:
 - Energy, Mines and Petroleum Resources (Mineral Resources)
 - Environment (Fish and Wildlife Branch, Terrestrial Studies Branch, Water Management Branch)
 - Provincial Secretary (Heritage Conservation Branch)
 - Tourism

Work Program

3. That, where they exist, items of agreement between agencies on the Steering Committee be identified immediately and the geographic areas to which this agreement applies be exempt from more detailed study.
4. That, as a minimum, the three options discussed in Section 6.1 following for the allocation and management of lands in the study areas be carefully investigated and the socio-economic and resource

use implications of the choice of any of these options be clearly identified.

5. That the Parks and Outdoor Recreation Division and the Ministry of Forests discuss the Copper Creek drainage currently within Manning Park and evaluate what impact this drainage might have, if removed from the Park, in offsetting potential timber losses in the Cascade Wilderness Study area.
6. That the Ministry of Forests and the Heritage Conservation Branch review the existing Joint Historic Trails Administration agreement and prepare a revised agreement satisfactory to both agencies.
7. That the areas of inadequate information, identified in Section 6.2 following, be corrected by the agencies concerned and that this information be provided to the Steering Committee by a date established by the Committee.
8. That the Steering Committee indicate in its final report its preferred option and the reasons for its selection, or its difference of opinion regarding options, for the designation and management of lands within the Cascade Wilderness Study area.

Timing

9. That the Steering Committee forward its final report for review to the Tulameen Public Advisory Committee (Princeton) and the Lower Mainland and Thompson-Okanagan Resource Management Committees, by the end of December, 1981, and to the E.L.U.T.C. and the E.L.U.C. by the end of February, 1982.

6.0 OBSERVATIONS

6.0 OBSERVATIONS

6.1 Possible Allocation and Management Options

Further to the recommendations presented in Section 5.0, it should be noted that several possible options for the allocation and management of lands within the Cascade Wilderness Study Area emerge from the preceding documentation of resource values and statement of concerns and recommendations from Provincial agencies. These options are based on the following assumptions:

- the recognized importance, both historical and recreational, of the major historic trails in the study area — particularly the Hudson's Bay Company Brigade Trail and the Dewdney Trail — and of adjacent corridor landscapes
- the unique scenic and recreational value of the Paradise Valley and Snass Mountain/Punch Bowl area, as identified by both the Forest Service Recreation Branch and the Parks and Outdoor Recreation Division
- the significance of other resource uses, particularly forestry, to the local economies of Princeton (and Merritt)

These options include, but are not limited to, the following:

1. Designation of all, or a major part, of the study area as either a "Wilderness Conservancy" or a "Class A" extension of Manning Park. In recognition of competing demands for the resources of the study area, this option would allow for minor amendments to such a "Conservancy" or Park boundary from that boundary used for study purposes. This option recognizes the heritage and park and outdoor recreation values of the study area and the importance of the wilderness state of the area to the appreciation of these same values.
2. Retention of the study area lands as Crown Forest under the jurisdiction of the Ministry of Forests for "multiple use" management. This option would give primacy to timber and extractive uses throughout the study area. The Forest Service Recreation Section would be responsible for designation of recreation sites - Paradise Valley Meadows and Snass Mountain (Punch Bowl

Lake area, for example and trails such as the Dewdney and Hudson's Bay Company Brigade could be protected by designation under the Forest Act or through implementation of a revised Joint Historic Trails Administration Agreement between Heritage Conservation Branch and the Ministry of Forests. Logging to prescribed environmental and aesthetic standards could also protect water and fish and wildlife values in the study area.

3. Creation of a core "Wilderness Conservancy" or Park area encompassing Paradise Valley Meadows, Snass Mountain/Punchbowl Lake and part or all of the drainages of 17-20 Mile Creeks, Snass Creek and Skaist River; protection of the Hudson's Bay Company Brigade Trail under a revised Joint Historic Trails Administration Agreement, possibly expanded to include visual corridor protection. This option recognizes the significance of specific recreational and heritage values within the study area and their potential linkage with the existing Manning Park yet gives primacy to timber and extractive uses in parts of the study area where the former values are less significant. This option could include joint consideration by the Parks and Outdoor Recreation Division and the Ministry of Forests of that portion of the Copper Creek drainage presently within Manning Park and of the effect that this drainage could have in offsetting timber losses created by a Park extension into the study area.

While these three options do not exhaust the possibilities for designation and management of lands within the study area, they are representative of the proposed status ("Wilderness Conservancy" or "Class A" Park), the present situation (Ministry of Forests' management), and an intermediate position.

6.2 Information Gaps

In compiling the resource documentation material for this report, certain inadequacies became apparent:

1. The Town of Princeton draws its drinking water from the Tulameen River. The upper watershed of the river is in the Podunk and Paradise Valley Drainages of the study area (Figure 15).

No hydrological data exists for this watershed and it is unclear what effect logging, or even cattle and horse grazing, in these drainages might have on the quality and quantity of water in the Tulameen River at Princeton, particularly in the dry months of summer.

2. While mineral potential has been estimated based on geologic environment, more detailed information on valuable mineral deposits can only come about as a result of on the ground assessment. Such an assessment could be costly and would require a summer field season.
3. Fish and Wildlife information for the study area is cursory, at best. A summary of existing information on species and numbers and on critical summer and winter ranges would be a definite aid to the final phase of the study.
4. Neither the Ministry of Tourism nor the Ministry of Industry and Small Business Development, which jointly administer the Travel Industry Development Subsidiary Agreement (T.I.D.S.A.), has been involved in the Cascade Wilderness Study. Inclusion of one or both of these Ministries in the final phase of the study would help in identifying the potential for tourism and subsidiary economic benefits of various resource management options.
5. While the impact on employment of the restriction or prohibition of logging in the study area has been identified, no attempt has been made to investigate the longer-term broad shifts in resource sector employment that may come about in the Princeton area regardless of decisions in the study area. For example, there is potential employment loss as a result of the "falldown" effect in the forest industry; correspondingly, improved silvicultural techniques, more intensive forest management, technological advances and the utilization of currently non-commercial species may increase the availability and volume of future timber supplies, thus offsetting potential employment losses. The energy resource sector (coal, pipelines, Hat Creek construction, etc.) also offers the potential of short and - in the case of operation of the Hat Creek Thermal Generating Station - relatively long-term employment. The Ministries

of Industry and Small Business Development and Energy, Mines and Petroleum Resources could both be of help in defining the dynamic employment context within which this study finds itself.

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B. C.

APPENDICES

APPENDIX I

Circular Letter 2806 - Parks/Forest Service Joint
Historic Trails Administration Agreement

APPENDIX I

DEPARTMENT OF RECREATION AND CONSERVATION

PARKS BRANCH

CIRCULAR LETTER #27-74

May 9, 1974
Victoria, B.C.

FILE: 3-2-32 - 99

TO ALL PARKS BRANCH STAFF

RE: Joint Administration of Historic Trails
Parks Branch - B.C. Forest Service

For your information and reference we are enclosing a copy of Forest Service Circular Letter #2806.

The contents restate the points of joint agreement for cooperative administration of these trails as agreed between the Chief Forester and the Parks Branch.

Your cooperation with the B.C. Forest Service in establishing, protecting, maintaining, etc. of Historic Trails is required to ensure the success of this joint administrative venture.

R.H. Ahrens.

R.H. Ahrens
Director

Encl.

CH/ds

April 3, 1974

Our Files: 0218081
0297001 #3

Your Files: M. Co-op Rec. & Con.
M. Rec. Sup.

To: All District Foresters
All Division Heads
Forester i/c Forest Service Training School

CIRCULAR LETTER NO. 2806

Historic Trails Administration - jointly by Parks Branch and the Forest Service.

On 1 May 1973 maps were sent to each District showing the approximate locations of historic trails, for notation on your maps and records. These had been identified by Parks Branch as trails which were significant in the historic development of the Province and therefore warranted protection.

Joint agreement has now been reached between Parks Branch and the Forest Service for co-operative administration of these trails. The following is for your guidance and direction.

1. The Forest Service recognizes the desirability of preserving identifiable original portions of historic trails, and of protecting the general routes of historic trails for public use and enjoyment.

2. The Crown land area traversed by historic trail locations will remain under Forest Service or Lands Branch jurisdiction, as at present, except in special situations.

3. These 'special situations' may occur where exceptional recreation or historic values are involved as, for instance, in sections where identifiable original trail still exists. In such cases Lands Branch will be asked to place a reserve or easement in favour of Parks Branch over Crown land occupied by the trail and a fringe area of appropriate width.

4. The co-operative procedures to be observed are:-

a) Parks Branch will notify the Forest Service as to the general routes of historic trails in which it is interested. (This has already been done.)

b) Timber Division, Victoria, will forward this advice to Districts for notation on maps and records. (This has already been done.)

c) Districts will advise Timber Division, Victoria, as early as possible about developing situations, or any existing or future licensee activities which may affect an historic trail. This advice will be forwarded to Parks Branch.

d) Parks Branch will assign crews to investigate trail values and potentials on a priority basis determined by its available staff and the advice received under Point 4c above.

e) Where Parks Branch crews determined that an historic trail route is adaptable to public use, they will flag the location clearly on the ground, and carry out a chain and compass traverse for transfer to 20 chain or 40 chain maps, and air photographs.

f) Parks Branch will forward maps and photographs (Point 4e) to the Forest Service for entry on Victoria and District maps.

g) Forest Service representatives will accompany Parks Branch crews over these previously located and plotted trails, to familiarize themselves with the route and make a detailed assessment of timber stands and management considerations along the route. Joint inspections will take place as soon as mutually convenient to the personnel involved.

h) At the time of the joint inspection any 'special situations' warranting status protection in favour of Parks Branch will be identified. Examining officers should consider each case on its individual merits and keep the fringe bordering the trail of minimum width necessary to achieve the desired purpose. Potential road locations in proximity to trails must be critically reviewed to minimize adverse effects.

A report on each case, supported by sketch map, clearance sheet and recommendations will be forwarded by the District Forester to Timber Division, Victoria, for processing and referral to Lands Branch.

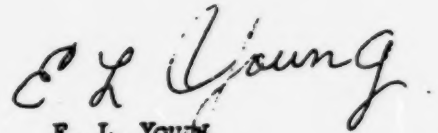
i) For sectors of trail which lack visual historical traces, and these will comprise the major distance of any historic trail route, no change in current land status will be made. These areas will remain under Forest Service multiple use management, with measures taken to protect the trail values wherever possible.

Any new licensee tenure encompassing such trail sectors should carry conditions requiring re-opening or re-establishment of trail unavoidably damaged during operations. Similarly, where it is considered necessary to remove timber adjacent to the trail regeneration measures should receive priority.

j) After an historic trail has been re-opened, Parks Branch and the Forest Service will service and maintain the trail on a co-operative basis, to be worked out by local staff.

k) Parks Branch will be responsible for any directional or interpretive signing along the trail.

This subject has been dealt with at some length because it is considered highly important that we demonstrate, both to the public and to other resource personnel, our ability to work effectively and co-operatively in resource administration. Parks Branch has already gone on record, to several petitioners, supporting joint administration of historic trails in preference to a suggested large park addition north of Manning Park, and we must now do our part to make this concept work.

A handwritten signature in cursive script, reading "E. L. Young".

E. L. Young
Chief Forester

APPENDIX II

Public Involvement

APPENDIX II - Public Involvement

1. Introduction

Public involvement during the preparation of the Cascade Wilderness Study Status Report was, for the most part, channelled through the Tulameen Public Advisory Committee in Princeton. This Committee, established by the Ministry of Forests, resulted from a public meeting held in Princeton in June 1980 to discuss forestry and resource issues of concern to the local area and region.

The Tulameen Public Advisory Committee consists of some 28 members representing interest groups in the Okanagan, the Princeton area and the Lower Mainland. The diverse concerns of these groups range from water quality, mining and ranching through historic trails and wilderness preservation and recreation (Sec. 2- Members of the Tulameen Public Advisory Group). A draft outline of the Cascade Wilderness Study Status Report was presented to the Committee in February 1981 and the draft report in April 1981. In June, the study coordinator attended a third meeting of the Committee to receive written comments, answer questions and discuss the future direction of the study.

Where possible, concerns of these interest groups were incorporated into the Status Report as part of its revision prior to printing. Comments which were editorial in nature, a statement of an interest group's policy or in direct conflict one with another were not incorporated into the Status Report. The full text of written comments from these interest groups follows in Section 3 of this Appendix.

In the final phase of the Cascade Wilderness Study, now underway, a broader program of public involvement is planned. This program will be jointly overseen by the Parks and Outdoor Recreation Division (Vancouver) of the Ministry of Lands, Parks and Housing and the Ministry of Forests (Kamloops).

2. MEMBERS OF THE
TULAMEEN PUBLIC ADVISORY COMMITTEE

Forest Service:

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J. E. DeWolf (Bud)
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VOX 1W0
Ph. 295-6457

D. L. Jones (Dave)
Habitat Protection Biologist
Okanagan District Fish and Wildlife
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Ph. 494-1513

Historic Trails:

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Indian Bands:

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Non-Mechanized - T. Jones (Trevor)
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V6H 2Y5
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Regional District of Okanagan-Similkameen:

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R.D.O.S.
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Penticton, B.C.
V2A 5J9
Ph. 492-0237

October 1981

3. Written Submissions from Member Interest Groups

(a) General

As noted previously, the draft Status Report was presented to the Tulameen Public Advisory Group in April, 1981. By the end of June, much comment had been received from the Group and was reviewed prior to editing of the draft for presentation to the Environment and Land Use Technical Committee in August, 1981. Notwithstanding the incorporation of many of these comments into the Status Report, they are reproduced below in full. While this leads to some repetition of information and concerns, this repetition is seen as preferable to the loss of comment, possibly considered crucial by a particular interest group, which might result from an edit and summary of this material by the study coordinator. In the few instances where page references are given, these refer to the draft report and do not necessarily correspond to the page numbering in the published Status Report.

Before turning to the full text of these comments, it is worth noting the most common areas of concern which emerge from their reading. These are:

1. The difference in size between the Cascade Wilderness Study boundaries and those proposed for the Wilderness Conservancy by the Okanagan Similkameen Parks Society (O.S.P.S.). The former area is some 40 700 hectares in size; the "minimum" wilderness area suggested by the O.S.P.S. is approximately 32 620 hectares while the "reasonable extension" is approximately 39 140 hectares. A number of interest groups suggest that the larger boundaries of the Cascade Wilderness Study "overrepresent" the conflicts between the various resource uses - mining and logging, for example, with their associated employment, as opposed to recreation and wilderness conservation. While the Study boundaries include some land not considered essential for wilderness, recreation or historic trails purposes, however, it is also noted that other areas of significance - in particular, the Hudson's Bay Company Brigade Trail to the northeast and the Upper Peers Creek Valley - were not included within the Study boundaries. In defence of these boundaries, it should be stated that they encompass an area less than 4% larger than the "reasonable extension" proposed by the O.S.P.S. and that most of this additional area can be accounted for by an attempt to follow a height of land boundary wherever possible.
2. Information gaps, particularly in the areas of hydrology, fish and wildlife and tourism potential and its associated economic benefits. These information gaps are identified in the study (p. 75) and it is noted in the Foreword that it is to be left to the agencies coordinating completion of the final report to determine the extent to which such data is essential to a decision on future land allocation and management.
3. The completeness and accuracy of forestry data, including estimates of "employment foregone". Some interest groups feel that the volume of timber which might be lost to logging, were the area to become a Wilderness Conservancy or an extension to Manning

Park, and the associated employment estimates - both direct and indirect - are exaggerated; other interest groups state the exact opposite.

4. The lack of comment from the Parks and Outdoor Recreation Division (Ministry of Lands, Parks and Housing) in section 4.0 - Agency Concerns/Recommendations. The Parks and Outdoor Recreation Division was asked for a contribution to this section but preferred to limit its comment to the assessment of park and outdoor recreation values in section 3.0.

(b) Specific Comments

This section contains specific comments from interest groups in the following sequence:

- (1) Citizen of Princeton
- (2) Downstream Water Users
- (3) Fish and Game
- (4) Forest Companies
- (5) Historic Trails
- (6) Parks
- (7) Town of Princeton
- (8) Wilderness Preservation and Non-Mechanized Recreation

(1) Citizen of Princeton - W. Aspinall

ANALYSIS OF THE CASCADE WILDERNESS STUDY

STATUS REPORT

As a representative of the citizens of Princeton on the Public Advisory Committee set up to advise the Forest Service on issues relating to timber, range and recreation management in the area of the Upper Tulameen River, I would like to direct my remarks to you on the proposed establishment of the Wilderness Conservancy in the area and on the Cascade Wilderness Study - Status Report recently prepared for submission to the E.L.U.C.

A large part of the proposed Conservancy lies within the Merritt Timber Supply Area. A report on the Merritt T.S.A. has recently been prepared and released. A conclusion of this report is that the cut of timber from crown forests within the T.S.A. cannot be maintained at its present level without causing serious timber shortages. The withdrawal of forest land for the creation of this proposed conservancy would further hasten this forecasted timber shortage.

I am truly distressed to observe that our Provincial Government is giving serious consideration to this proposed establishment of a wilderness conservancy in light of:

1. The existence of a Class 'A' Provincial Park adjacent to the area, within which the "wilderness areas" are currently receiving very little use.
2. The clear evidence that the timber resource on which the economy of the Province is based is already being diminished at an alarming rate, largely as a result of single use alienations of forest land for purposes other than growth and harvest of timber.

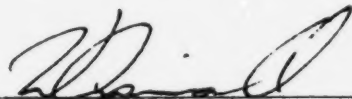
I am also upset with the status report documenting the inventory of the resources within the study area. It has been prepared with a clear bias against the timber, mineral and grazing values. I have reached this conclusion after noting that the timber, mineral and grazing values appear to be mentioned only in passing and that by far the greatest portion of this status report has been devoted to other "values".

Cont'd.../2

Analysis of the Cascade Wilderness Study
Status Report

Page 2

Princeton is not unlike the rest of the Province in that its economy is to a very large extent dependent on the Forest, Mining and Ranching industries. If it was not for these three industries, Princeton would, for all intents and purposes, cease to be. I am, therefore, opposed to any withdrawal of forest land for any single use purpose that threatens the economy of Princeton. I suggest that our Provincial Government would better serve the interest of the Province by establishing a Provincial Forest over the study area.



W. Aspinall
Citizen of Princeton

(2) Downstream Water Users - A. Herz

Herz Cherry Orchard

Cowston

British Columbia

June 16th 1981

Ms. Sandra Henson,
Tulameen Public Advisory Committee,
Box 670,
Princeton, B.C.

Dear Ms. Henson,

Cascade Wilderness Study

As representative of the Downstream Water Users on the Public Advisory Committee for the Cascade Wilderness Proposal, I would offer the following comments:-

Although our major concern is with the quality and quantity of water from the watershed in the moratorium area, other matters are also of great importance to us and must be very seriously considered. The points below indicate some of our major concerns.

1. Hydrological Data.

The information we have received has only a bearing on locations in the U.S.A. and no information has been presented that gives any assurance of non-disturbance of the present water flow. The meagre information available is oriented only to the effects on Princeton, without regard to the other communities affected.

Page 22, Water Investigations Branch, Measures for Minimizing Detrimental Hydrological Impacts of Logging in Community Water Supply Watersheds of B.C.

" Special consideration and caution should be given to logging of high elevation forests. Although level benches and other areas with stable terrain do exist at high elevation areas, the higher precipitation (than at lower elevations) and the need to construct 'switch-back' roads systems to provide access to these areas usually create serious problems. Furthermore, the timber values in high elevation areas are usually low, but the value of the forest in site protection and flow regulation is generally high. These areas are usually most important in terms of water yield

Ms. Sandra Henson

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- 2 -

June 16th 1981

production and flood generation but are most susceptible to permanent damage caused by site disturbance."

2. Roads.

The large number of roads involved will open this area to A.T.V. and 4-wheel drive users etc. and creates a very serious hazard to the area. It would seem impossible, given the comments of the logging companies' representatives, to close these roads satisfactorily. This point and the point above, seem to be the most serious concerns in this whole study.

3. Area under Study.

The report, as it stands, is misleading in that figures given refer constantly to the moratorium area and cloud the fact that the Cascade Wilderness proposal is only a part of that area and the resources are therefore much less than for the whole.

4. Fish and wildlife.

The information given appears to be incomplete and innacurate and more information on this area is needed by the Committee.

5. Timber.

Some of the figures appear confused and innacurate, sometimes referring to the larger moratorium area and failing to clarify the figures for the Cascade Wilderness area, which is only a part of the moratorium area. The job loss figures should be adjusted for the smaller Cascade area, rather than the larger moratorium area.

Ms. Sandra Henson

- 3 -

June 16th 1981

6. Parks and Outdoor Recreation.

It would seem that a submission by this ministry is essential before proceeding any further.

7. Tourism.

Insufficient data is given on the value of preserving this area, with its unique collection of historic trails. Already, the delicate balance of other Park areas in B.C. is threatened by overuse and with the tourist industry growing it is essential that this area, situated near a major city and highway, be preserved, unspoiled, for the use of hikers, horse-trail riders etc. The area requested by the O.S.P.S. is extremely small, only 407 sq. km., and given the new and improved forest management techniques, it is difficult to see that the protection of this area could cause any serious loss to the forest industry.

8. Steering Committee.

This would seem a good idea, providing an independent Chairman is appointed. There must be no conflict of interest.

9. Moratorium.

Since figures indicate that the harvest of this timber is of no immediate urgency to the industry, we suggest that the moratorium be continued for the time being, to allow further study and protection of this unique and interesting area.

We hope that the above points will be of value to you in considering the Cascade Wilderness Study Status Report. Thank you for your attention.

Yours truly,

A. C. Herz

Ms. Audrey C. Herz

(3) Fish and Game - J. E. DeWolf

PRESENTATION BY THE PRINCETON FISH & GAME ASSON. ON THE "STUDY AREA" TULAMEEN WATERSHED AREA, OR WHICH WE REFER TO AS "PARADISE VALLEY"

We are told that any decision regarding the area will be made by the Minister, and that we are to "voice our area of interest or concerns." I am certain that we all are concerned with every aspect of this area; and I for one have learned a great deal from our meetings to date. It is our sincere wish that we may present to the Minister, and this assembled group, a picture of the problems facing our Wildlife. The necessity of addressing our total area should be apparent as we continue.

The "Paradise Valley" area is the last semi-isolated area for much of our wildlife, and a vital segment of their annual habitat.

While this area contains a wide variety of wildlife species we will speak of the larger in numbers, of Deer, Elk, and Moose. Some Grizzly Bear, which is an endangered species, are to be found in the valley and surrounding mountains.

While there are some deer to be found on or near the ranches in the valley floors through-out our area, year round, the main herd of deer are migratory as are the moose and elk but to a slightly different degree. In April, at lower levels where snow is shallower, one can count 1-200 deer near Princeton in an afternoon drive. Soon they have mostly left heading basically west. Some do not go too far, but most travel into high country, Paradise Valley and similar areas north of this, for food and solitude for the birth and raising of their young.

In the late fall there are many places where in snow one can witness the return from Paradise Valley to the lower areas around Princeton, and many continue much farther. The ideal locations are Skaist, Kettle, Granite, Deer and Lodestone mountains which are crossed during migration, and Bromley or Fitzgerald mountain.

The "Habitat Protection Officer," Fish & Game, The Forest Service, Biologists, and the logging companies or wood mills have together made tremendous advances in considering fish & game, their need for food, travel corridors, shelter etc., Many roads have been "put to bed" or attempted, to try to minimize excessive pressure on both fish & game areas.

The most serious problem now for migrating animals, or those moving up and downhills to feed, to water etc, is to "run the gauntlet" of the web of roads and hunters stationed on, or patrolling the roads.

In every direction from Princeton, the area through which the game migrate ~~many~~ many hundreds of square miles of formerly safe travel or resting areas are riddled with roads which they must cross. This vulnerability will increase many fold in the years to come.

We are told that we may be looking at an end to the mature timber in the total P.S.Y.U. in possibly 25 or 30 years; and more than "mature timber" is being cut.

Main haul and feeder roads are advancing at probably 100 to 150 miles per year. The Forest Service would have the annual mileage in the P.S.Y.U for each of the past 5 or 10 years.

The profusion of roads have been hard on the migrating game in the total area but we draw your attention to four distinct areas.

- 1) Willis Creek--Smith Creek, Stirling Creek, Plateau west & south of Crater mountain peak.
- 2) East and North^{OK} Rampart lakes over to Siwash creek
- 3) Pike Mountain- Princeton to North end, Otter Valley -to Princeton -Merritt Highway.
- 4) Whipsaw Road to Coalmont- Lodestone, and west of Princeton.

The profusion of roads in these areas has been one of the major factors in an increase in game kills by hunters. Last year we placed the moose kill at 55 animals for our area. This was verified by the local Conservation Officers. A ten year average would be 3 to 6 animals.

This year we know of 7 Elk taken from Pike Mountain. From our reports all were seen, or shot from the roads. A yearly normal take would be a couple of animals from that area.

While the logging of areas can and does enhance the game habitat you cannot have vast total areas stripped of timber such as Lawless Creek- the West side of Thynne mountain--Brooks lakes etc., and expect to have game animals migrate successfully nor winter successfully.

In March of this year a Symposium was held on "Threatened Species and their Habitat", at Richmond. This was sponsored by Fed. of B.C. Naturalists, Inst. of Environment's Studies at Douglas College, and The Fish & Wildlife Branch of the Ministry of the Environment with financial support from the "World Wildlife Fund (Can)". Three hundred attended and we wish to pass on some items pertinent to this study.

- a) B.C. is home to 5/6 of all mammal species in Canada, 2/3 of the birds and a similar proportion of plants.

- b) Fred Bunnell--U.B.C. Dept of Animal resource ecology= 117 species of mammals in B.C. (excluding whales, porpoises, & dolphins) 28 of them are found nowhere else in Canada. There are 236 sub-species in B.C. and 163 of these are found nowhere else in Canada. Breeding Bird population 288 species in B.C. - 35 species exclusive to B.C. and 392 sub-species of which 127 are exclusive to the province.
- c) Dr. Ian McTaggart Cowan- all evidence emphasizes that North Americans, with their concept of local autonomy in resource management, have established the worst record of any continent in the destruction of native animals.

Currently there are 108 species of wildlife either rare or endangered in North America, north of Mexico.

If one accepts the concept of an ecosystem as an intimately inter-linked system of biotic and abiotic factors such that each component in it has some interaction with all others, then it follows that it is impossible to do only one thing to ^{AN} ecosystem.

Frequently the sequence of events is a gradual reduction of available habitat through lumbering, agriculture, flooding, (dams) and settlement. Governments fail to recognize the trend and continues the inappropriate reaction to the biota that have survived from an earlier state of society. It defaults on its responsibility to design and enforce suitable protective legislation-- or simply has more important priorities.

Those who hunt and the organized sports clubs have during the past 25 years petitioned extremely hard to reduce bag limits from 3 deer to the present 1 and a season of 95 days, which was in effect through-out the total time of migration, to the present 52 days which ended prior to the start of migration. This is not effective management as such, but one more move to correct one major problem and, a voluntary contribution by thousands of hunters of their successful hunt, thus enhancing the quality and quantity of the animals.

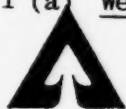
We wish the Habitat Protection Officer, Mr. Dave Jones, Penticton B.C. to be informed of all recommendations by this group, preferably by relieving our minutes. He will be our expertise for game animals and their needs in the area in question, and in all of our area.

Thank You

Bud DeWolf President

Princeton & District Fish & Game

4.1 (a) Weyerhaeuser - R. E. Taylor



Weyerhaeuser Canada Ltd.

Wood Products Division
Box 550, Princeton, British Columbia VOX 1W0
Telephone (604) 295-3281 Telex Office 048-88182

May 26, 1981

S. Hensen, Chairperson,
Tulameen, P.A.C.
Princeton, B. C.

Dear Madame:

Re: Response - Cascade Wilderness Study Status Report

The status report attempts to identify the forest, heritage, mineral and park and outdoor recreation values within the study area. Much information is included on historic trails and outdoor recreation in the 35 page presentation; however, the data provided for both forestry and mining is incomplete. Although we understood the necessary information for mining is unavailable at this time, that is not the case for forestry. Some key points will be covered as we follow through the report.

SPECIFIC CONCERNS

Section 3.2 Timber

Page 11 - paragraph 2. Within the Kamloops Forest Region, the study area is part of the #6 Timber Supply Block of the Merritt Timber Supply area.

Page 14 - The breakdown of forest types by site class should be done for all classes, not just mature timber. These areas should then be prioritized on the basis of:

<u>Site Class</u>	<u>Priority</u>
Good	#1
Medium	#2
Poor	#3
Low	#4

Without identifying the priorities, the impacts of the various alternatives cannot be quantified. It would also be of value to construct a table showing the acreages by site classes within the Fraser and Merritt TSA's in total to give a person a yardstick for comparison.

- Page 14 - Following this section, the report should have included a map showing the location of the timber types on a contour map. This would have allowed a better understanding of the conflict situations within the study area.
- Page 15 - Following the tables on Annual Allowable Cut, there should be a section included on Intensive Forest Management and the potential gains possible on the study area.
- Page 15 - The last paragraph blanks should be filled in by the B.C. Forest Service. There should also be a section that explains the difference between timber supply commitments and industry requirements. For example, in the Merritt TSA industry, requirements are some 25% larger than present timber commitments which in turn are being cut at a rate greater than the sustainable yield based on the long term run analysis as outlined in the Merritt TSA Report.
- Page 16 - This table shows the "Estimated Impact" of withdrawal of the study area land base and is again very inadequate. The following comments are relevant to the Kamloops Forest Region only, but should have been included.

1. Direct Wages losses to the communities of Princeton and Merritt.	\$1,502,090.00 per year
2. Indirect Wage losses within and outside of Princeton and Merritt.	2,277,072.00 per year
3. Loss of Revenue Product Value—a)lumber	2,092,208.00 per year
b)chips	261,136.00 per year

All pertinent data relating to these calculations will be supplied upon request. Note no inclusion of taxes have been shown. (i.e. Personal Income Tax, Provincial and Federal Sales Tax, and Corporate Taxes).

SECTION 3.3 HERITAGE

Page 17 - 3.3.1 - Historic Trails

The trails are described as playing a "major role in the early history". The HBC Brigade Trail and Whatcom Trail were both difficult routes and were abandoned when suitable alternatives were developed. These trails were only in use a short period of time.

SECTION 5.0(5) RECOMMENDATIONS

Page 70 - Recommends that Parks and Outdoor Recreation Division and the Ministry of Forests discuss the Copper Creek drainage as a trade-off for the Cascade Wilderness area. This possibility is most surprising as we have held discussions with the Ministry of Forests during the last few years over Copper Creek but not once did this option surface. We are at a loss to figure out where this suggestion comes from and cannot see it as an acceptable exchange. All discussions have centered around trading Copper Creek for the Skaist drainage as it would rationalize the boundaries of Manning Park on the heights-of-land.

SECTION 6.1 POSSIBLE ALLOCATION AND MANAGEMENT OPTIONS

Page 71 - Under assumption number 3, the affect should be broadened to include—forestry to the local economy of Princeton, Merritt and the Province of British Columbia.

Page 71 - The discussion of the various options excludes the option of removing the Moratorium and returning the area to its status as forest land.

SECTION 6.2 INFORMATION GAPS

Some information should be included on the benefits experienced as a result of roads being built into the area. Access for the cattle ranchers has to be important. Moreso, the large numbers of handicapped people and people out of shape who cannot see the beautiful peaks or lovely meadows unless road access is made available should also be pointed out. Road access for timber preservation is also important because nature will eventually burn up an overmature, rotten and diseased forest to clear the way for a new stand.

Since this proposal is for a wilderness conservancy information on the present useage of the Manning Park backwoods areas should be included. Even though some of this data is sketchy, it is by Mr. Waltons own words the "best information available", and should, therefore, be considered. In our perusal of this information and actual experience, we contend that these large tracts of wilderness areas are enjoyed by a very few and priviledged people and question if back areas within Manning Park cannot fulfill their needs. We again urge all concerned to support the multiple use concept where all resource users have an opportunity to satisfy their needs for the betterment of the people of our Province, remembering that this is not possible without some trade-offs by the different affected groups.

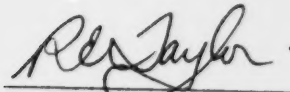
- 104 -

- 4 -

Response - Cascade Wilderness Study Status Report

Yours truly,

WEYERHAEUSER CANADA LTD.



R. E. Taylor
Woods Manager

RET/bw

c.c. S.J. Tolnai
R.L. Helfrich

4.1(b) Weyerhaeuser - R. E. Taylor



Weyerhaeuser Canada Ltd.

Wood Products Division
Box 550, Princeton, British Columbia VOX 1W0
Telephone (604) 295-3281 Telex Office 048-88182

June 30, 1981

Mr. Peter Walton
Senior Planning Co-ordinator
Ministry of Municipal Affairs
Victoria, B.C.
V8W 3E1



Dear Mr. Walton:

As discussed with you during our Tulameen Public Advisory Meeting of June 25, 1981 I am enclosing a copy of the F.L.C. Reed Report in the B.C. Forest Industry. In addition I am attaching a facts sheet which was prepared by Weyerhaeuser which explained more fully the forestry values in the moratorium area within the Kamloops Forest Region. We hope these can be attached to our response to your phase I report of Forest Values as further types of information that should be included and recognized when a decision on this area is made.

The three sections in the Reed report that are worth reading are page 111-#2 under 1V-Employment Impact of the Forest Industry page, 56 and 61. We feel that the provincial multiplier is more representative to use than the Okanagan Multiplier because the ratio in that area is distorted by the heavy concentrations of agriculture and therefore unlike our area. We suspect that the basic to non-basic job ratio's are different between a primarily oriented forestry and mining community like Princeton and an agricultural oriented area as the Okanagan.

The analysis by Peter Hatfield of the soil survey report that has been prepared for the Study Area shows the following:

KAMLOOPS FOREST REGION PORTION

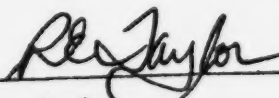
High capability soils	2%
Moderate capability soils	26%
Low capability soils	59%
Nil capability soils	13%

It is inferred by Mr. Hatfield that the Forest Land within the Study Area is generally a poor growing site.

However an evaluation of the capability of the land in the Study Area to grow commercial timber using only those four very broad capability classes can be very misleading. At first glance it could be concluded that an area classified as having low capability is a poor site that could best be managed for a purpose other than the growth and harvest of timber. But it should be noted that these classes are only relative to that growth which could be expected from the very highest capability soils in the country.

The component of Nil forest capability represents 100% of the study area within the Kamloops Forest Region that is classified as rock, swamp, alpine, or other non productive forest land. There is no intention to harvest or attempt to regenerate any of this Nil forest capability land. 17% of the low forest capability land is also non productive most notably alpine and subalpine. It is very difficult to assess the remaining 83% of low in terms of its capability to grow commercial timber using only the Canada Land Inventory capability data because of the very wide range of mean annual increment (MAI) that this class of Forest land is capable of maintaining, (11 to 50 cubic feet/acre/year). The average MAI of stands on the very best sites in the entire Similkameen PSYU falls within the range defining low forest capability.

A much more accurate indication of productivity of the site within the Study Area can be obtained from the Forest Service classification of site in terms of observed height over age of the major species on that site.



R.E. Taylor
Tulameen Pac Member

MORATORIUM STUDY AREA

(Within the Kamloops Forest Region)

1) ACREAGE- FOREST COMPARTMENT-87	- 10917 ha	(Paradise-Polunk)
-13	- 5623 ha	(Skaist)
-88	- 2985 ha	(Vuich)
	19525 ha	

Information taken from the Ministry of Forests -
Forest Cover Inventory Maps.

2) FOREST CLASSIFICATION- Mature timber	- 6104.9 ha	- 31%
- Immature timber	- 6718.8 ha	- 35%
- NSR (Not sufficiently restocked)	- 1727.2 ha	- 9%
- Non Forest Land (water, rock, alpine)	- 4970.9 ha	- 25%
- Non Commercial (Brush)	3.6 ha	-
	195.25 ha	100%

Information taken from Ministry of Forests - Forest Cover
Inventory Maps.

3) Mature Timber - Forest Compartment	-87 - 2,028264 m ³
	-13 - 694554 m ³
	-88 - 37897 m ³
	<u>2,760715 m³</u>

This mature volume represents approx 75000 truck loads of
timber. Also note there exists a larger area of young immature
stands than mature stands. (see #2 above).

Information taken from Volume Summary Sheets Ministry of Forests
Forest Cover Inventory Maps.

4) FOREST TYPES BY SITE CLASSES (Expressed as a percentage of the
area) (Tree age in relation to height growth)

		GOOD	MEDIUM	POOR	LOW
ASHNOLA	PSYU	1%	28%	71%	-
SIMILKAMEEN	PSY	17%	54%	28%	1%
MORATORIUM STUDY AREA		26%	36%	38%	-

This comparison of all forest types both mature and immature
shows that the moratorium study area when compared to large
adjacent areas is Good Forest Land.

Information is derived from Ministry of Forests - Forest

COVER INVENTORY MAPS AND SUMMARY SHEETS

5) REDUCTION OF ANNUAL ALLOWABLE CUT

Annual Allowable Cut - Princeton Community	- 26720/m ³ /yr.	53.3%
- Merritt Community	- 23412/m ³ /yr.	46.73%
(Total Both-Communities)	50132m ³ /yr.	100%

The above comparison shows the last AAC for each community should the moratorium study area be converted into a single use Park Conservancy. This AAC reduction of 50132 m³/year is somewhat larger than the B.C. Forest Service calculation of 46215 m³/year. We have had a professional forester spend much time of this calculation and not only do the simplistic calculation based on Hanzliks formula but also run through the detailed area - volume allotment checks. We have much faith in our numbers and feel that the B.C. Forest are somewhat low in their calculations .

6) LOSS OF DIRECT & INDIRECT (SUPPORT) JOBS.

- 1979 Total Forest Industry Employment - 95000 direct employees
(supplied by the council of Forest Industries)
- 1979 Total Production in the Forest Industry - 76,162,281 m³
(Taken from the Ministry of Forests Annual Reports)

Therefore the Annual Production required to support one direct employee in the Forest Industry = 793 m³/man/year.

Applying this to the Moratorium Study Area this represents for the communities of Princeton and Merritt

$$\frac{50132 \text{ m}^3}{793 \text{ m}^3} = 63 \text{ direct jobs per year total.}$$

This does not mean that 63 people would be out of work tomorrow and forever more in Princeton and Merritt. It does mean, however, that if this Moratorium study area is removed from our resource base, that the value of 63 direct jobs would be lost and forever. Some direct jobs would be lost but we would guess that when considering the make-up of manufacturing plants particularly, that industry would probably look at shutting down operations during the year to offset this shortfall. Nevertheless, the value and dollars of these 63 direct jobs would be lost to the Princeton and Merritt communities.

7) LOSS OF INDIRECT SUPPORT JOBS

The F.L.C. Reed report entitled " The British Columbia Forest Industry and Its Direct and Indirect Impact on the Economy prepared for the Department of Lands Forests and Water Resources " indicates a provincial multiplier of 2.8, that means for each direct job that there exists 1.8 support or indirect jobs. The F.L.C. Reed Report also states the calculation of indirect employment was extremely conservative and it believes that the provincial multiplier actually exceeds 3. The report also indicates that the multiplier is less in small communities than larger centers.

In light of this information the ILMA have interrelated this information as follows:

63 direct jobs	63 direct jobs
<u>x 1.8 multiplier</u>	<u>x 2+ multiplier</u>
113.4 indirect jobs	126+ indirect jobs
<u>120 indirect jobs</u>	

It should be understood that of these 120 indirect jobs that many of these exist outside of Princeton and Merritt and that it would take a tremendous amount of work to determine those in community values.

This exercise is at this time is beyond our resources, capabilities and allowable time frame.

8) VALUE OF LOSS OF DIRECT WAGES/YEAR.

In our Princeton and Merritt areas there exists approx 1 direct forestry or logging worker to 2 sawmill related direct jobs. Therefore of the 63 direct jobs referred to above 21 are forestry and logging types and 42 are sawmill related.

21 direct jobs @ \$107.57/days x 210 days/yr	=	\$474383.70/yr
42 direct jobs @ \$97.10/day x 252 days/yr	=	<u>\$1027706.40/yr</u>
		\$1,502,090.10/yr

These day rate earning are taken from the B.C. Ministry of Labour's Labour Research Bulletin, January 1981.

9) VALUE OF LOSS OF INDIRECT (SUPPORT) WAGES/YEAR.

Because these type jobs are most difficult to follow through and weight them because of their complexity we have taken the average B.C. wage from the Ministry of Labour's - Labour Research Bulletin January 1981 to determine the potential value loss. As stated before this value loss would occur in Princeton and Merritt and other areas outside these communities.

$$120 \text{ jobs @ } \$75.30/\text{day} \times 252 \text{ days} = \$2,277,072.00$$

10) VALUE OF LOSS OF STUMPAGE REVENUE.

$$\text{Average stumpage Loss} = \$217,800/\text{year}$$

Information derived from Ministry of Forests - Region Report.

11) LOSS OF REVENUE OF PRODUCT VALUE.

$$\begin{aligned} \text{A) Lumber Value - AAC} &= 50132 \text{ m}^3 = 17704 \text{ units/year} \\ &\quad \times .620 \text{ net recovery} \\ &\quad 10976 \text{ M bdft/year} \end{aligned}$$

- average SPF selling price

$$\text{May, June, July 1979 and 1980} = \$206.70/\text{M bdft}$$

$$\text{-Therefore lumber value loss} = \$10976 \times 206.70 = \$2,268,739.20 \text{ per year}$$

$$\begin{aligned} \text{B) Chip Value } \$50 \text{ per BTUX } .32 \text{ BTU per cunit} \\ \times 17704 &= \$283,264.00 \text{ per year} \end{aligned}$$

Note these figures are higher than submitted in response to PAC group because those values were based on B.C. Forest Service AAC as the P. Walton report was. We feel these are the correct numbers.

No calculation of the value of Personal Income Tax, Provincial and Federal Sales Tax or Corporate Taxes have been included in this presentation.

4.2 Balco - P. Smith

ANALYSIS
OF THE
CASCADE WILDERNESS STUDY

The whole report seems to be slanted towards identifying the recreation values in the area. I don't disagree with what they are saying. In fact their information is quite descriptive and complete.

The timber section of the report dwells on the loss of jobs, dollars and cut if the area is not managed for multiple use. All this is very important, but there has to be a further analysis of the Forestry conditions on the ground. As far as the Forestry section of the report is concerned, it is very incomplete. The Forest Service has to add more to the timber value description. They have to show where the bodies of mature timber are. They also have to assess the condition of this timber. Is it defective, insect infested, losing growth, over-mature, etc.?

If the scenic and recreational values can be identified, and they have very well in this report, then the Forest Service, to complete this report, has to show the bodies of timber that could be managed with little or no conflict with the recreation values.

Also, nobody is really admitting to how much more some of these recreation values could be enjoyed by more people if Forestry roads gave better access to the heart of the area. It is all well and good to have protected values, but if the average public does not have the money or time to get there, then the protected values are not benefiting recreation.

May 13, 1981

Charles C. Smith
BALCO D.D.
Niola D.D.

(5) Historic Trails

- 112 -

5.1 Okanagan Similkameen Parks Society - A. J. Hansen

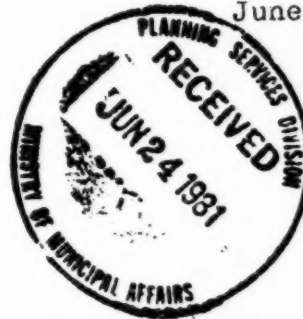
OKANAGAN SIMILKAMEEN PARKS SOCIETY

AFFILIATED WITH THE NATURE CONSERVANCY OF CANADA

POST OFFICE BOX 787, SUMMERLAND, BRITISH COLUMBIA V0H 1Z0



June 18, 1981



Ms. Sandra Henson
Chairwoman
Tulameen IAC
Princeton, B.C.

Dear Ms. Henson:

Since the expected Great Debate about the second draft of the Walton report did not really materialize at the last IAC meeting, we wish to contribute some comments by way of this letter.

In general, we think Mr. Walton has done an excellent job in collecting whatever pertinent information was available, and in separating the wheat from the chaff. We thought that the soil report was an especially thorough and well-done piece of work, which will be useful regardless of the final management option adopted. We were also pleased to see that the concerns of the different groups had been listed. We realize that the frame of reference given by ELUC apparently limited Mr. Walton's data base to information provided by government agencies.

In order to make the report more complete, and to avoid possible misinterpretations, we request that the following points be included in the report in one way or another.

Economy

The major opposition to our wilderness proposal comes from the logging interests. We feel, therefore, that the economic aspects should be analysed as thoroughly and completely as possible. The present draft relies heavily on theoretical data submitted by one ministry only. This approach reflects the attitude that the economic wellbeing of the Princeton area and of the whole of B.C. depends almost exclusively upon logging and milling. Even a cursory glance at the fact shows that this view is unrealistic. In fact, logging is declining in relative importance while technology-based and service activities are gaining. What holds true for the economy in general also holds true for the employment situation within forestry: the number of jobs in the logging end is declining, while increases are taking place in technology-based secondary manufacturing and improved silviculture. This trend will continue, regardless of minor withdrawals of crown land.

In order to clarify this point, we request that the following additions and changes be incorporated into the report:

- 1) that the number of jobs foregone because of establishment of the Cascade Wilderness be also calculated on the basis of 2.3 or 2.5% of the actual present employment, since our proposal will reduce the available AAC by approximately that percentage.
- 2) that only direct and indirect employment be used in either form of calculation, and that the so-called "multiplier effect" be deleted. "Multiplier effects" are fine for model studies and analyses of economic integration, interaction and interdependence, but are not intended for field studies of this type.
- 3) that all figures reported to the committee be examined in detail by Mr. Walton, so that he can determine which are correct and which are in error. Some errors were already corrected by the Ministry of Forests during our last meeting. We trust that these, and others which may be needed, will be included in the final version of the report.
- 4) that it be made absolutely clear in the report whether the economic data presented, and the impact evaluation, refer to the municipality of Princeton (in which case they should refer to the milling jobs only!), or to the economy of the general area, which includes the logging and trucking operations, as well as the income and opportunities, as well as the tax base provided by the Princeton copper mine and related residential development, by increased tourism, by the expected expansion of silviculture and by other economic activities.

Alternatives

As long as the purported negative impact of the Cascade Wilderness upon the local economy receives broad coverage, the expected positive influences and alternatives should be mentioned in a little more detail.

Some of the positive developments will be directly related to the establishment of the Wilderness status and can be measured relatively easily: experience in other parts of Canada and the USA has shown that establishment of parks and wilderness areas has provided an immediate stimulus to the local industry, mostly through increased tourism and related activities. Given the anti-conservation attitude of the present US administration, and the overcrowded conditions of practically all US and many Canadian parks, the Cascades will immediately become a major attraction. This will stimulate and help to diversify the narrowly-based economy of Princeton. Increased silviculture, to which both the ministry and the industry are firmly committed, will add further jobs, as will the continuing trend toward secondary manufacturing.

We therefore request that an effort be made to obtain further data regarding the alternatives and that these be included in the analysis.

Wildlife

The data presented are extrapolations of large-scale habitat maps. Apparently, everybody on the AAC agrees that they are very misleading and therefore useless. If Mr. Dalton has to stick with the principle of government data only, we suggest that the wildlife be left out completely. If an exception can be made, we request that data be obtained from the Princeton Fish and Wildlife Club, and be included in the report.

Sense of Proportion

We agree with the Ministry of Forests that the designation of the proposal area for wilderness instead of logging will influence the future timber supply in B.C., and that it should be seen in a province-wide context. However, we disagree that this would present the danger of "serious consequences for...the Province as a whole" (Draft, p. 61). To put such alarmist statements into the proper perspective, we request that the timber figures be presented as

- 1) actual measured values, such as m^3 per year; ha affected, etc.
- 2) as percentages of the supply in the two forest regions
- 3) as percentages of the B.C. supply.

Such presentation will facilitate an impartial judgement of the economic importance of the matter to the Province, especially for those readers who may not be familiar with all the details of forestry and timber measurements.

Even though the impact of the Cascade Wilderness on the timber supply of the Province will be negligible, we realize that it could create local hardships and changes, especially in view of the predicted fall-down effect. Since the Ministry of Forests is making a serious effort to enforce the sustainable-yield principle, similar shortages are becoming apparent throughout most of the Province. According to a very detailed industry/ministry study (An analysis of forest management options for the Okanagan Timber Supply Area; B.C.M.O.F. and Shuswap Okanagan Forest Assoc., 1980) the only possible way out of this dilemma lies in an accelerated programme of silviculture, with heavy emphasis on maximizing production and concentrating efforts on prime sites. If one of the self-financing options of the study is implemented, AAC can not only be maintained, but can be increased, even in the face of the predicted $1\frac{1}{2}$ annual loss of timber land in B.C. (of which our proposal would represent only about $1/15$ or $1/20$!).

We request that this silvicultural option of overcoming any negative impact of the Wilderness area be included in the report.

Tourism

We were disappointed at the poor response and lack of data from the Ministry of Tourism. We did not expect that they would have figures on the present use of the area, since most use occurs in a dispersed way. However, we suspect that they have some data on the demand situation for outdoor and wilderness recreation.

If they are unable to come up with details, we request that Mr. Walton contact the management of other recently-established trail and wilderness areas of similar type (such as Pacific Rim or the Cathedrals) to obtain use figures for the time before and after opening of the parks. The Pacific Crest Trail Mgm. might also have data

Recreational Land Base

Until recently, B.C. has shown very little interest in preserving natural areas. As long as much of the province was un"developed", this presented no or little conflict. During the last 15 years, however, a crisis situation has developed, since excessive logging has reached proportions which seriously threaten all our remaining natural areas. As more and more marginal and high-altitude land is being logged, the recreational land base diminishes much more rapidly than the productive forest land base. Lack of time may not permit a detailed analysis of this situation, but we request that the important overall aspects be at least mentioned in the report. This point is especially important in relation to statements such as on p. 40, that certain areas "are not unique or outstanding on a regional basis", because if logging outside the Wilderness continues at the present rapid pace, the proposal area soon will be the only undisturbed and therefore unique alpine landscape.

Management Options

It is unlikely that we will be able to reach a conclusion which is acceptable to everyone on the PAC. This makes it even more important that the parameters are absolutely clear, so that those choosing an option know precisely what consequences their choice will have.

We therefore request that Mr. Walton add a brief description of the protective clauses of the various possible management systems to his report. We would especially like to see the "Forest Site" designation explained in detail, since even the present draft of the report claims that it provides "protection", which in fact it does not.

Input needed

Mr. Walton is aware of the data gaps, and we hope that he will be able to obtain some more details from the agencies concerned.

We request that he specifically asks for an Agency Concerns/Recommendations statement from the Parks and Outdoor Recreation Division; for some reason, this is the only agency which has not submitted such a recommendation.

Timber, gros vs. net

We discussed this matter during the last two PAC meetings, but we are not sure we got the data needed, not the explanation requested. Unfortunately, we do not have a copy of the letter from Kamloops. However, we can probably leave this matter with Mr. Walton and request that he obtain clear gros and net timber figures for the proposal area. We also request that he add a short explanation of what these terms mean, again for those readers who may not be familiar with the details.

Study area vs. Proposal area

As we have seen, the study or moratorium area is larger than the area proposed by us. We request that separate figures be included in the report, wherever they are available, to show the difference between the two. This is especially pertinent to the statements regarding mining, and regarding timber resources.

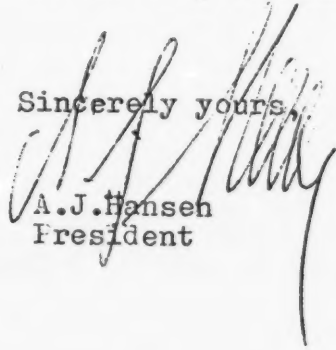
"Recreation Reserve" terminology

This term has cropped up several times during the discussions and in the draft. Mr. Robinson confirmed during a telephone conversation just before our last PAC meeting that they were referring to a forestry "Recreation Site", as specified in § 104 - 107 of the Forest Act, and in the pertaining Regulations. We hope that this will be corrected throughout the draft.

This covers our major concerns and requests for additions to the Walton report.

We are looking forward to the PAC meeting on June 25.

Sincerely yours,


A.J. Hansen
President

cc: P. Walton

5.2 Okanagan Historical Society - J. V. H. Wilson

OKANAGAN HISTORICAL SOCIETY

VERNON - KELOWNA - PENTICTON
ARMSTRONG - OLIVER
OSOYOOS - SIMILKAMEEN

R.R. 1, Naramata, B.C.

June 23, 1981

Sandra Henson, Chairperson
Tulameen Public Advisory Committee
P.O. Box 670
Princeton, B.C., VOX 1W0

Dear Madame:

The following summary should serve for discussion of our recent comments re the Cascade Wilderness Study Status Report, Second Draft.

We request that the Report clearly define and give information, regarding the O.H.S.-O.S.P.S. Proposal as well as the Moratorium Area. We request that the Peers Creek Area and the eastern section of the Proposal be included in the Study or given Historic Trails recognition as noted on p. 55.

We request that Forest Ministry figures re "Estimated Employment Foregone" be corrected and explained.

We request that recognition be given to the Okanagan H.B.Co. Brigade Trail and that the Study note the short lengths of original trails that survive inside and elsewhere in B.C.

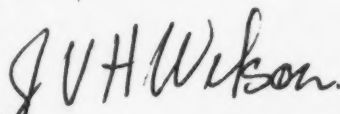
We request that references to four-wheel drive access and trail signing be corrected.

We request that the material in the Summary, pp. 53-54 should appear in the text of the Study in more detail and with some evidence before it is included in the Summary.

We request that the Report take cognizance of the position of the Okanagan Historical Society regarding historic users of the area.

We request that incomplete resource studies be completed and that Agency concerns/recommendations from Parks and Outdoor Recreation Division of Parks Branch be circulated and comments received from interested groups before the final report is written.

Yours truly



J.V.H. Wilson
Historic Trails Representative
Tulameen Public Advisory Committee

OKANAGAN HISTORICAL SOCIETY

VERNON - KELOWNA - PENTICTON

ARMSTRONG - OLIVER

OSOYOOS - SIMILKAMEEN

R.R. 1
Naramata, B.C.

June 20, 1981

Sandra Henson, Chairperson
Tulameen Public Advisory Committee
P.O. Box 670
Princeton, B.C., VOX 1W0

Dear Madame:

The following comments regarding the Cascade Wilderness Study Status Report, Second Draft, April 21, 1981 are submitted by Victor Wilson as Historic Trails representative to the Tulameen Public Advisory Committee on behalf of the Okanagan Historical Society and A. David MacDonald, President, Penticton Branch of the Okanagan Historical Society.

References, unless otherwise noted, are from the Cascade Wilderness Study Status Report, Second Draft, April 21, 1981.

Of concern to our organization, from the May 9, 1980 announcement of the Cascade Wilderness Study and the moratorium on logging and the mineral reserve which accompanied the Study, has been the variations in the boundaries of the Study--Moratorium area from the Cascade Wilderness Proposal submitted to the Environment and Land Use Committee of Cabinet by the Okanagan-Similkameen Parks Society and the Okanagan Historical Society. Compounding the problem of area boundaries has been the variation of the Tulameen Public Advisory Committee mandate to study the Tulameen River drainage with the fact that the Skaist River drainage upstream from the Manning Park boundary, though west of the Cascade divide, is included in the Similkameen P.S.Y.U. of the Kamloops Forest Region and information provided to the Tulameen P.A.C. regarding resources under the Forest Ministry have applied to the two watersheds, rather than that part of the Tulameen drainage within the moratorium. With two exceptions the Cascade Wilderness Study boundary is on or outside the Cascade Wilderness Proposal boundary. The Cascade Wilderness Study Report should show both the Study and the Proposal boundaries on all maps and should provide comparative figures for both areas when providing information regarding area, timber, mineral resources, grazing and any other resource conflicts with the Cascade Wilderness Proposal. We feel no hesitation in defending the boundary of our Proposal, but wish the Status Report to indicate and explain the larger boundary of the Cascade Wilderness Study.

Some of the implications of the boundary variations are listed below:

1. To the east of the Proposal boundary the Study area extends to the height of land along the Tulameen Plateau, taking in considerable timber and grazing land and several mineral claims.

2. The Proposal extends northeast of the Study area to seek protection for the Horseguards, Camp Three from Hope, and the Hudson's Bay Company Brigade Trail of 1849 where it crosses and follows first Packers Creek and then Squakin Creek to the Upper Defile, as it climbs to the Tulameen Plateau, a particularly well defined and scenic as well as historically well documented original section of this trail.

3. The Study area extends farther northwest in the Sowaqua Creek valley than the Proposal, taking in considerable forest land and T.S.H.L. A00635 which is mostly outside the Proposal, and a portion of a current mineral claim.

4. The Study omits the Upper Peers Creek Valley where protection is proposed for the Hudson's Bay Company Brigade Trail of 1849. Reference to this section of Trail was made in a letter dated August 14, 1972 from R.H. Ahrens, Parks Branch, to the Chief Forester: "In considering protective measures for the Brigade Trail, it is important to bear in mind that the Peers Creek portion of the trail not only has recreational value as an access to the splendid alpine country of Manson Ridge, but is also an extremely significant historic site. From 1849 until after the gold rush of 1858, the Brigade Trail was the sole line of communication between the Coast and the Interior of what is now British Columbia. Worn into the steep slopes of Manson Ridge by thousands of pack animals in a little over a decade of intensive use, the trail's switchback route remains remarkably well defined today, a unique relic of the country's fur trade era virtually unaffected by time. If logging is conducted over the Peers Creek route, almost all of the historical impact of this hitherto well-preserved trail will be lost forever."

5. The Seventeen Mile Creek Watershed is part of the Study, outside the Proposal area.

Any proposal for non-destructive multiple use of an area must be weighed against the Forest Ministry's calculations of "Estimated Employment Foregone". These should refer to jobs on a sustained basis. We therefore question the use of Annual Allowable Cut (Currently Approved) Table 4, p. 15 as a measure of the timber supply for the study areas in both the Vancouver and Kamloops Forest Regions. To calculate sustained employment the Long Run Sustained Yield of the Study Area should be used. The importance of this is noted when comparing AAC for the Study Area within the Kamloops Forest Region, given as 46,215 cubic metres (Table 4, p. 15) when the Merritt Timber Supply Area Report of February 1981 indicates L.R.S.Y. of 16,700 cubic metres per year in the "proposed Cascade Wilderness area" (p. 27). We request that the means of calculating the L.R.S.Y. and an explanation of the variables that would affect this total be part of the Status Report. We would also ask that in calculating

direct, indirect and induced jobs the report indicate that for the Kamloops Forest Region portion of the Study and Proposal Areas the figures are based on B.C. Interior rather than on the B.C. Coast Logging and milling calculations which hasn't been done in Table 5, p. 16. The calculated "Estimated Employment Foregone" should also reflect the smaller area of the Proposal Area in both the Vancouver and Kamloops Forest Regions. We expect that Tulameen PAC members involved in the industry and Ministry of Forests liaison people on the committee will also be calling attention to these factors to correct the discrepancies in the present figures.

In reference to "Resource Values", p. 10, of particular interest to the Okanagan Historical Society was the inclusion in the comprehensive study of the Proposed Cascade Wilderness Conservancy of the heritage values in the proposal area. The general statement, p. 10, should identify the contribution the Heritage Conservation Branch of the Ministry of Provincial Secretary and Government Services made to the Heritage Resource Values section of the Status Report on pages 17 to 28. At the same time it should be noted in Section 3.1 that there has not been a comprehensive survey of the archaeological resources (p. 17) nor a detailed and complete study of all the trail routes in the Proposal and Study areas.

The uniqueness of the five historic trails within the boundaries of the Cascade Wilderness Study and Proposal Areas results from their close physical proximity as mentioned on page 18, but also results from these sections of trails being in most cases the last remaining significant original lengths of each trail.

On the native trail from Blackeye's Camp on Otter Lake to the headwaters of the Tulameen at the Punch Bowl only approximately eight miles from below the Punch Bowl to Wells Lake remain.

The map of "Major Historic Trails", p. 20, Figure 8 should also show the Hudson's Bay Co. Brigade Trail through the Okanagan Valley to Fort Kamloops and north to Fort Alexandria on the Fraser River. To quote Margaret Ormsby in "British Columbia: a History", p. 47

"After 1814, New Caledonia was supplied with trade goods brought by ship from England and transported by canoe from Fort George (Astoria, at Columbia River mouth) to Fort Okanagan and from there by pack train to the upper Fraser..."

This trail served the Hudson's Bay Company until 1847 when the United States border was closed to their commercial travel, and "probably 8,000 miners followed this natural highway from the south to the gold fields of the Thompson and Fraser Rivers by the end of 1858" (Ormsby, p. 142). Only short, fragmented sections of this 360 mile trail have been identified and survive today, most on private property or on Indian Reserves.

The Brigade Trail built in 1849 from Fort Hope to Tulameen (Campement des Femmes) and on to Fort Kamloops, a distance of some 170 miles provided a rugged alternate route in British territory between the interior and the sea. The longest section of Brigade Trail, 37½ miles, survives today within the Cascade Wilderness Proposal area.

Of the estimated 270 miles of Whatcom trail from Bellingham Bay to Kamloops (reference, p. 17, R.C. Harris, H.R. Hatfield, Old Pack Trails booklet) short sections survive in the Chilliwack River area and approximately six miles of original trail traverse the east fork of Snass Creek, through Punch Bowl Pass and down the Tulameen to intersect the Dewdney Trail in Paradise Valley, within the Cascade Wilderness Proposal area. Forests-Recreation Branch statement, p. 43, that "this section of trail is difficult to find as neither end of the trail between Snass Mountain and the Dewdney Trail is evident" is contrary to Old Pack Trails description, pp. 18,19 of the Whatcom Trail.

On the Dewdney Trail, Fort Hope to Wild Horse, of approximately 440 miles, three separate sections of some length each remain. The section north of the Salmo-Creston highway, up Lost Creek and down Summit Creek has in recent years been paralleled for much of its length by a hydro power line and service road; on the 23 mile section between Christina Creek and the Rossland-Paterson Highway, re-opened by Parks Branch, in co-operation with the Forest Service and the private landowners (50% of this section lies within private property), publication of a trail booklet and travel may be discontinued according to David Suttill of Heritage Conservation Branch, because of lack of jurisdiction over the private property traversed by the trail; within the Cascade Wilderness Proposal 15 miles of identifiable Dewdney Trail of 1860-61 follow Snass Creek, Paradise Valley and Hubbard Creek to the east boundary and an additional length of more than six miles crosses the headwaters of Granite Creek and drops down 47 Mile Creek to the Whipsaw Creek road outside the Proposal Area.

The Hope Pass Trail (Skaist River Section) was built as an alternate or diversion of the Dewdney Trail and is a shorter, more open route south of Snass Creek and Paradise Valley. Built in 1861-2, it became more commonly used, better maintained by government public works and longer used (some 80 years) than the section of the Dewdney Trail it bypassed. Some 4 miles of this trail are within Manning Park, 6½ miles in the Cascade Wilderness Proposal and 3 miles extend east to the Whipsaw Creek road. This trail is as historically significant as the Dewdney Trail section that it superceded.

It should be noted in the Status Report that nowhere, within or outside any park in this province, in Canada, or in North America is there such a concentration of "... historic trails in a natural setting representing several phases in British Columbia's early trail-based transportation system." Dave Suttill, Datum, v. 5, No. 4, p. 16, 1980. We therefore request that the statements on pp. 53, 54 be changed to reflect this.

In total there are some 73 miles of historic trails within and an additional 15 miles extending beyond the boundary of the Proposed Cascade Wilderness, with more than 25 miles of additional trails also traversing the Proposal area.

Reference is made in the Status Report, p. 18, to Manson Camp which was the first camp east of Fort Hope on the Hudson's Bay Brigade Trail, some 14 miles east of Hope, near the headwaters of Peers Creek. According to Mr. Harley Hatfield this campsite was undisturbed during his early travels of rediscovery up this section of trail in the early 1970's, but subsequent clear-cut logging has destroyed any evidence of this historically important campsite.

In reference to mention of road access into the actual study area, p. 3, and to the Paradise Valley area, p. 32, we offer the following: Road access into the actual study area is via Highway 3 and Whipsaw Creek Road to the vicinity of Hope Pass, then via a four-wheel drive road following closely the Study's eastern boundary and the height of land, entering the Study Area east of Skaist Mountain and proceeding through the area west of Kettle Mountain and north to Paddy Pond where the Dewdney Trail of 1860 is crossed. Or road access is from the Coalmont, Granite City, Blakeburn, Lodestone Lake road, then via a four-wheel drive road south on the Tulameen Plateau entering the Study Area immediately north of Wells Lake, then proceeding over Granite Mountain to join the Whipsaw Creek road to the south.

The statement on p. 32 should be clarified to remove any impression that there is four-wheel drive access into the Paradise Valley by Whipsaw Creek and the Dewdney and Hope Pass Trails.

Reference on p. 34 to the publication, "Old Pack Trails in the Proposed Cascade Wilderness", published by the Okanagan-Similkameen Parks Society should be updated to indicate 5300 copies now sold.

The Recreation Branch of the Ministry of Forests statement on p. 34 that the series of historic trails have not been signed or publicized adequately enough to encourage substantial use should be updated to record that a programme of signing for highway accesses, access roads, trailheads, and trails was initiated by Parks and Outdoor Recreation Division of Parks Branch and the Okanagan-Similkameen Parks Society in 1979 and should be substantially completed this year with help from the Highways, Parks and Forest Ministries and has recently come under the auspices of the Ministry of Forests. We concur with the thought that adequate publicity would encourage substantial use of the many trails leading to and within the Proposed Cascade Wilderness.

We concur with the statement from p. 35 in the visual inventory conducted by the Ministry of Forests Recreation Branch, that states, "Limited views of small features...were not recognized in this study, requiring more intensive ground observation."

We believe there is some confusion in values though, when we read on pages 35, 36, "Viewing opportunities in valley bottoms and other areas with dense forest cover were usually rated as low."

"The generally low rating given to canopied views such as within old-growth stands ignored the visual experience afforded by these stands." Statements such as these reflect the strong bias of the numerical rating system used by the Ministry of Forests. We wonder whether a more people-oriented system of evaluation is available from Parks and Outdoor Recreation Division and could be applied to the Study.

The enclosed letter to Mr. Alan Carter dated May 19, 1977 with map, helps to establish the historic significance of the Ghost Pass Trail mentioned in the Status Report on pages 18 and 41. A correction should be made to the date of earliest documentation of this trail's existence in the reference on page 18.

Access to Paradise Valley, mentioned on page 48 should note that it is by Dewdney Trail up the Snass Creek from Highway 3, and from the east by Dewdney Trail from the four-wheel drive road at Paddy Pond or by Whatcom-Blackeyes Trail from the four-wheel drive road at Wells Lake.

Access to Hope Pass Trail, east trailhead, mentioned on p. 52, is off the gravel road up Whipsaw Creek. It should be corrected that the access is not to Hope Pass but to a point approximately 1½ miles east of Hope Pass to keep wheeled vehicles from trying to gain access to the sub-alpine areas of Hope Pass.

In the summary, page 53, we question the use of the word "portions". We contend that "portions" are not going to "adequately" provide the park and recreation values in the North Cascade Mountains. To fragment the area would destroy much of the historical experience. Roads are the kiss of death for the wilderness.

We most seriously question the Summary statement, p. 53, which says, "Although the existing historic trail systems in the study area were developed for horse and hiker use originally, only the Dewdney and the Hope Pass Trails would, in reality, be suitable for these uses." This section should appear in the text in detail and with more evidence before it is included in the summary. We quote from notes by Harley Hatfield to rebut this obviously uninformed or misinformed opinion.

"It is definitely not true that only the Dewdney and Hope Trails would in reality be suitable for horse and hiker use. At present the Brigade Trail is very suitable for hikers from Lodestone Lake to Hope, and for riders to Fools Pass at the foot of Manson Ridge. One can now connect from it to the Dewdney by the jeep track and the Whatcom. There is an old trail, presently requiring some marking and clearing for about six kilometres up the Tulameen from the Horseguard which connects with the Whatcom and Dewdney. The Vuich Trail connects the Brigade to the Tulameen River road and is regularly used by horses. The Rice Trail (extension of the Vuich to the south of the Podunk) connects the Brigade via Prospectors Creek to an old trail down the Sowaqua which again joins the Brigade at the Sowaqua crossing. This trail was commonly used in years past but does now need marking and clearing. The Rice Trail was

made about 1916 by Ernest Rice to reach his claims on the west side of Mt. Outram. It could undoubtedly be joined to the Mt. Outram Trail from the west entrance of Manning Park. Rice used it for pack horses to get supplies to his camp on Outram. It crosses the Ghost Pass Trail at the main Sowaqua.

Beyond the source of Prospector's Creek (the north fork of the Sowaqua) a considerable amount of marking and clearing will be required to make all these connections. The Ghost Pass probably would not make a horse trail but is certainly an interesting hiking route. All in all there is certainly the potential for a network of horse and hiker trails based on the Brigade."

We would appreciate comments from the Parks and Recreation Division and from the Heritage Conservation Branch on the statement from page 54 of the Summary, Resource Values section which says, "Few areas have as many historic trails, nor ones that are in as good a condition." We ask the Recreation Branch of the Ministry of Forests to identify any area, anywhere in the province of British Columbia, in Canada or in North America where there are as many as three historic trails, let alone five historically significant trails in one area. We can't but agree on the statement about the good condition of the trails.

We note that in Figure 22, p. 55, the Ministry of Forests considers of "High Recreational and Visual Significance" a section of the Brigade Trail in Peers Creek, west of the Study Area and sections of the Dewdney and Hope Pass Trails east of the Study Area. We seriously question the omission of the Brigade Trail from the original Horseguards Camp at the Tulameen River, up Packers Creek and Squakin Creek, through the Upper Defile and across the Tulameen Plateau to where it joins the four-wheel track south of Lodestone Lake. This is a particularly scenic original identifiable section of the Brigade Trail which offers access to the Tulameen River and Podunk Creek to the west. We therefore request that this area be added to the Study Area. If this can't be done we request that the map on page 55 be changed to show this section of an historically and recreationally significant trail.

To comment on some of the agency concerns/recommendations we offer the following:

Re grazing and concerns of the Fish and Wildlife Branch, the Okanagan Historical Society believes that historic users of the area should continue to carry on activities that would be compatible with the preservation of the historic trails in their natural wilderness setting. These would include grazing, trapping, hunting and fishing, horse travel and packing, any form of non-mechanical travel whether on foot, ski, or snowshoe, and guiding and outfitting.

Re Kamloops Forest Region concerns, we have questioned the material in tables 4 and 5 and we believe the Merritt Timber Supply Area Report of February 1980 does indicate timber supply methods that would more than offset anticipated supplies from the Proposed Cascade Wilderness Area. We quote from Harley Hatfield's comments in answer to the last sentence on page 61.

"The Kamloops Region harps on the old "single use" as against "multiple use" argument. They even go so far as to say, "The area can be managed within integrated use principles for maximum benefit to all resource users." This is a ridiculous statement. Those interested in heritage and history, users of water, naturalists, wildlife, backpackers, hikers, riders, hunters, fishermen, trappers, guides, people in the tourist business and researchers in the fields of flora and fauna and in forestry itself, could still get some use from the Area if roads were built and the trees cut. They would by no means get "maximum benefit".

Our concerns include:

1. Information blanks, particularly in Ministry of Forests material in the Second Draft of the Status Report.
2. Lack of study by and information from Heritage Conservation Branch reflected in the fact that their material is not up to date regarding documentation and identification of recently rediscovered sections of historic trails. There has been no comprehensive archaeological survey nor detailed and complete study of all trail routes.
3. Very little and very generalized information only available on fish and wildlife from the Fish and Wildlife Branch.
4. Lack of input from the Ministries of Tourism and Economic Development to evaluate potential in these fields if preservation were to take place.
5. Lack of submission by Parks and Outdoor Recreation Division to Section 4, "Agency Concerns/Recommendations". We would appreciate reading and commenting on their concerns and recommendations before the final report is written. We would hope that their input in this section would mention the broader concepts of extension of the Pacific Crest Trail from the Canada-U.S. border north through the Cascade Wilderness, and present a stronger case for the recreational use of these remaining sections of historic trails.
6. From the experience of the O.H.S. and the O.S.P.S. with the Historic Trails Agreement in Peers Creek and on the Collins Gulch sections of the Hudson's Bay Co. Brigade Trail we have grave reservations about this arrangement as a means of protection for any trails in the Cascade Wilderness.
7. We have reservations about the statement on page 63, 4.1.2.3 that future management decisions for the proposal area "... will also benefit from the input of the Tulameen Public Advisory Committee, which will act on behalf of public interest groups." We question the ability of this P.A.C. to represent public interest groups under its present terms of reference and composition. Until now it has served as a funnel for information to the Status Report. After the Wilderness Conservancy has been established we suggest a Public Advisory Committee for the whole of the area covering both sides of the Cascade Divide.

Recommendations:

The O.H.S. and O.S.P.S. and others have expressed grave reservations about the Historic Trails Administration Agreement. Any revised agreement should include input from and representation by Parks and Outdoor Recreation Division and Heritage Conservation Branch plus input and representation from trail user groups to offset the weighted advantage of the Ministry of Forests in determining the policy and administering a revised agreement.

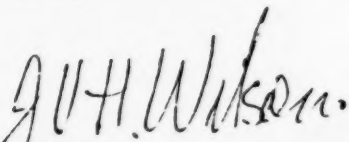
We also request that any proposed Steering Committee to oversee completion of the Cascade Wilderness Study be chaired by a person independent of any of the resource agencies involved and be acceptable to all the agencies and public groups involved in the Cascade Wilderness Study.

To those concerned with speeding the study and possible industrial activity in the area we suggest you consider the words of Bruce Fraser from the Spring 1981 issue of Forestalk.

"We're talking about making decisions for use of the landscape that are going to persist for generations. We can't afford to make them in haste."

Keep in mind that no one is creating wilderness or historic trails anymore. Once they are gone they are gone for good.

Yours truly



J.V.H. Wilson
Historic Trails Representative
Tulameen Public Advisory Committee



A. David MacDonald
President
Penticton Branch
Okanagan Historical Society

c.c. P. Walton

enclosures

May 19, 1977

Mr. Alan Carter,
Outdoor Recreation Council of B.C.
1606 West Broadway,
Vancouver, B.C. V6J 1X7

Dear Alan:

I do better going over things slowly by myself than at a meeting. Have just realized that there are several trails not on the list and which could probably be classed as historic. Some are in the proposed wilderness area northwest of Manning Park and some nearby. For some we are just beginning to realize their historic value, in addition to that for riding and hiking.

One in the proposed wilderness in the Ghostpass Trail. It was surveyed in 1930 by F.A. Devereux, C.E., as part of a horse trail to go from 18 Mile Creek on the Hope--Princeton Trail by the Sowaqua and the Pipestem Trail across to Siwash Creek on the Fraser. It is now open from 18 Mile Creek only to about a mile from Ghostpass Lake, so R.C.H. tells me. We only realized its full historic possibilities in the last month or so. An old map of 1860 shows a trail going that way to join the Brigade Trail at the Sowaqua crossing. It would appear that while the Princeton Mule Road (Dewdney) was still under construction the inward Brigade on 1860 went that way to avoid crossing Manson Ridge. By the next year they would be following the Dewdney to the summit and then the Blackeyes--Whatcom across to Lodestone and to Campement des Femmes. So that it seems the Ghostpass was not only an old mining trail, but was also at least for one year a Brigade Trail. And further for the Brigade people to seize on it so quickly in 1860 it must have been something of an Indian track before that.

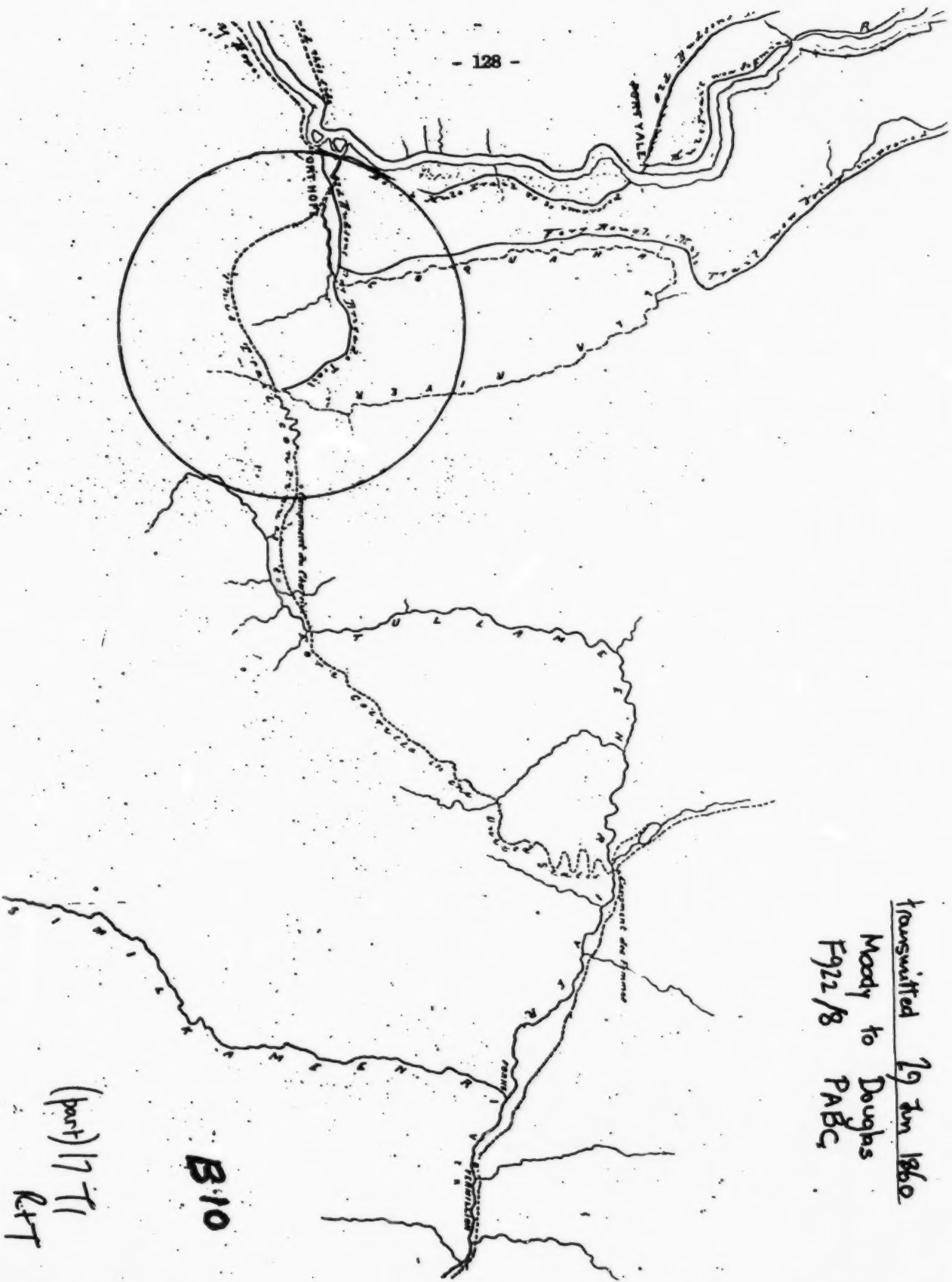
The Vuich Trail goes from what is now the Tulameen River Road, formerly trail, up Vuich Creek, by Jacobson Lake where it enters our wilderness area and across Podunk Creek and the Brigade Trail to the source of the north branch of the Sowaqua and down the Sowaqua joining (crossing) the Brigade Trail at the Sowaqua crossing. It is now open and used to the source of the north branch of the Sowaqua. More can no doubt be located and cleared. To date we have taken this to be a prospector's trail. The Creek was named for an old time prospector, Dan Vuich. Whether it was located in the 1880's or 70's or when we haven't found out yet.

The Dewdney Creek or Hope--Summit Camp Trail went from the Coquihalla up Dewdney Creek and Dead Horse Creek to Summit Camp (Summit City) (Dornberg's) and from there by the Tulameen River trail to Tulameen. When it was first opened I do not know, but in a document dug up by R.C.H. we find that Public Works cut out windfalls and repaired culverts and washouts. From Hope it followed the Hope--Nicola Trail (which would have originally been the Boston Bar Trail of 1859) to the 17 Mile Post. It no doubt has been badly damaged by logging.

We are presently engaged in a defensive action regarding the wilderness area. It is obvious now that we must, in order to gain all the support that is available, stop calling it "The Manning Park Extension". Many people support the idea of preserving the wilderness and the trails, without roads in the area, but object to Class A Park. They cannot be persuaded that any arrangement can be made to allow use of horses, or even limited hunting in a Class A Park. Perhaps we can call it Manning Historic Wilderness.

Sincerely,

cc: R.C. Harris



Transmitted 29 Jan 1960
Moody to Doughs
F922/8 PABc

B10

(part) 17 T1
R+T

May 19, 1977

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Outdoor Recreation Council of B.C.
1606 West Broadway,
Vancouver, B.C. V6J 1K7

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Sincerely,

from H.R. Hatfield

cc: R.C. Harris

(6) Parks - Okanagan Similkameen Parks Society - H. W. Johnston

OKANAGAN SIMILKAMEEN PARKS SOCIETY

AFFILIATED WITH THE NATURE CONSERVANCY OF CANADA

POST OFFICE BOX 787, SUMMERLAND, BRITISH COLUMBIA V0H 1Z0



Front Bench Road, R.R. 2
Summerland, B.C., V0H 1Z0

June 20, 1981

Mr. Peter F. Walton
Planning Services Division
Ministry of Municipal Affairs
Parliament Buildings
Victoria, B.C., V8W 3E1

Dear Mr. Walton,

The following are notes applying to the Status Report, Second Draft and several general comments applicable to the O.S.P.S.-O.H.S. presentation to E.L.U.C. and the subsequent moratorium-study.

From Status Report, Forest Ministry, Recreation Branch, p. 41, re Ghost Pass Trail:

"This trail historically joined the H.B.Co. Brigade Trail at Sowaqua Creek to the Dewdney Trail at Eighteen Mile Creek."

The enclosed letter from Harley Hatfield and map found in the archives by R.C. Harris help establish the earliest known date of the Ghost Pass Trail at 1860. Some previous material I sent to you dated a survey at 1929 or 30. Therefore a correction should be made to the reference, p. 18, under Heritage 3.3 and Historic Trails 3.3.1, to the following:

"Two additional minor trails exist in the area: the Vuich Trail...and the Ghostpass Trail, located in 1929 as a 'horse trail'".

We wish to know the author of the summary, p. 53, part B re trails.

Table of Contents

3.5 Parks and Outdoor Recreation (should also include Recreation Branch, Ministry of Forests as noted in 3.5.1 Format, p. 32)

Of considerable concern is the fact that the Study Area did not include the H.B.Co. Brigade Trail from Camp 3 at the Horseguards to the Tulameen Plateau. May I suggest that you check with Denis O'Gorman and/or Denis Moffat about this section of trail since they walked it with me in September of 1980.

In reference to mention of Seaton Lake, p. 18, a check with G.P.V. and Helen B. Adrigg, "1001 British Columbia Place Names" produced the following:

"A.C. Anderson named this lake after a near relative Colonel Alexander Seton."

I have noted Dave Suttill using the first spelling, but the reference suggests the shorter form is correct.

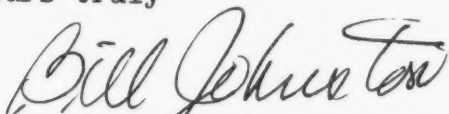
Status Report, p. 47, 3.5.9 third line, the headquarters should read headwaters.

Two requests from our Trail Committee of which you should be aware:

We believe we have a very vital stake in the Historic Trails Agreement and understand it is to be changed, and we wish the opportunity to have input into this revision process. This Agreement was brought about as a direct result of efforts in the early 1970's to protect the trails in the Cascade Wilderness. In our opinion, in its present form it has been something of a disaster in the hands of Forestry. Please note our concerns if possible and help us get input into the revision process.

On a broader base we are aware that the Study only notes input from Government Agencies. We don't believe your mandate allows for an open and complete expression of our concerns, and the Tulameen P.A.C. can't seem to get untangled from the narrow concerns of the Princeton representatives. We will be asking for a meeting with the Ministers involved directly in our Proposal-- Forestry, Parks, Heritage, Tourism, and would appreciate any suggestions as to timing and points of concern that we might answer at that time.

Yours truly



H.W. (Bill) Johnston
Trails and Wilderness Committee
Okanagan-Similkameen Parks Society

HWJ/mpj

encl

(7) Town of Princeton - S. Henson

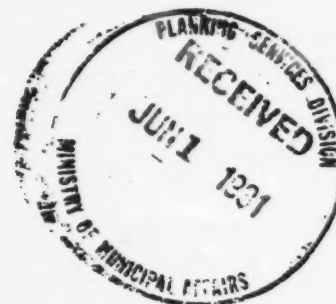
File No. 116

May 27, 1981

TOWN
OF PRINCETON

188 Bridge St. Tel: (604) 295-8144
P.O. Box 670, Princeton B.C. VOX 1W0

Peter Walton
Senior Planning Co-ordinator
Ministry of Municipal Affairs
Victoria, B.C.
V8W 3E1



Dear Mr. Walton:

This letter expresses the Town of Princeton's Council Members' views regarding the Cascade Wilderness Study Status Report, dated 21 April, 1981.

As you are aware Council has two major concerns: the impact on the Town's watershed (the Tulameen drainage area) and the effect on the Town's economy should the Cascade Study Area become a park or conservancy.

Council is committed to recommending multiple use for that area, with extra constraint being placed on logging, mining, and grazing to protect the area affecting the Tulameen drainage. Council further considers it imperative that the Town have input into future folio level planning.

When considering the report itself, Council made several observations:

- 1) The information gaps (e.g., fish & wildlife and the Kamloops sustained yield) and the total lack of existing hydrological data would seem to make any decision-making for the study area impossible if ELUC is to make recommendations based on complete data.
- 2) The impact of job losses to the Princeton and Merritt area are too significant to allow the study area to remain a wilderness park. Weyerhaeuser Canada Ltd. is Princeton's single industry; the loss of employment would profoundly affect the Town. Since the proposal would double the existing Manning Park area, the significance of loss of employment for future generations cannot be underestimated.

..... 2

Peter Walton
Senior Planning Co-ordinator

May 27, 1981

- 3) The significance and authenticity of trails in this area is questionable. Council recommends that portions of trail corridors which are authentic could be reserved if a trade-off was made to log the Copper Creek area. The truly significant historical features of the Princeton area are the archaeological sites (pictographs and fossils). Council considers archaeological site protection of more value than total trail protection.

Finally, the Town Council recommends that the area be removed from the moratorium at the end of two years and be returned to the multiple use concept.

Council trusts that you and the Environmental Land Use Committee will seriously consider its concerns in future reports and decision making.

Yours truly,



Sandra Henson
Mayor

cc Hon. Tom Waterland

SH/sn

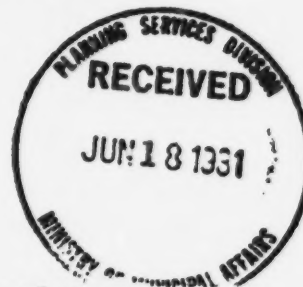
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3809 Osler Street
Vancouver, B.C.
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(8) Wilderness Preservation and Non-
Mechanized Recreation - P. S. Hatfield

June 15, 1981

Sandra Henson, Chairperson
Tulameen Public Advisory Committee
P.O. Box 670
Princeton, B.C.
VOX 1W0



Dear Madame:

Re: Cascade Wilderness Study Status Report, Second Draft,
April 21, 1981

I submit the following comments on the Status Report, on behalf of Trevor Jones and myself.

The Report contains inaccuracies and misleading information that we feel must be corrected before the Report is issued. The major misleading point is that the Cascade Wilderness Proposal area is smaller than the Moratorium Study area, so the resource conflicts are less for the former. The moratorium and study were commissioned solely because of submissions by the Okanagan Similkameen Parks Society advocating the wilderness conservancy. The Provincial Government decided to study a larger area. The Report should clearly state that the study area is larger than the Proposal area, should show the 2 areas on a map, and all information concerning resource conflicts (e.g., loss of forestry jobs due to land withdrawal) should be shown for the Proposal area. (The Tulameen PAC was formed because of water concerns by the communities on the Tulameen River, so the PAC's area of concern is smaller than the whole Moratorium area).

Specific points are as follows:

Timber

1) Page 14, Table 3 shows a breakdown of Site Classes for mature timber in the 2 Forest Regions making up the Moratorium Area. No breakdown is given for immature timber. The figures for mature timber infer that there

is a high proportion of good and medium sites in the Kamloops F.R., but by taking planimeter measurements of figure 6 in the Cascade Soil Survey (Vald and Daykin, Feb. 3, 1981), there is found to be a relatively low proportion of areas with high and moderate forest capability for regeneration. For example, only 2% of the Study area in Kamloops F.R. is high capability and 26% is rated moderate.

Kamloops Forest Region Portion

High Capability Soils	(2%)	365 Hectares
Moderate " "	(26%)	5,071 "
Low " "	(59%)	11,538 "
Nil " "	(13%)	2,568 "

Also, Table 3 should show the breakdown for the Proposal Area.

2) Page 15, Table 4 shows values for currently approved AAC in the Study area, by Forest Region. These values have been used in the bottom 2 paragraphs of p. 15 and on p. 16, as though they are synonymous with LRSY. However, the existing timber supply commitment in the Fraser TSA is 12% > LRSY, and in the Merritt TSA is 16% > LRSY. For calculation of long-term revenue and jobs foregone, LRSY figures should be used, not currently approved AAC. In addition, the values for the Proposal Area should be shown.

3) Table 4 shows currently approved AAC in Kamloops F.R. of 46,215m³. The Merritt TSA Report, p. 27, states that the LRSY in the Proposal Area is 16,700m³/yr. We have heard that this latter figure is incorrect. We feel that no figure should be shown unless there is a good deal of confidence in its accuracy.

We have not been able to get quantitative information from the Ministry of Forests as to the success rate of reforestation in the region. The Ministry does not appear to have this data, so we fail to understand how they could have calculated LRSY figures for the Study area. The LRSY figure is so important to the Report that the regeneration assumptions and backup data used to derive LRSY for the area should be shown in the Report.

4) Page 16, Table 5; are the estimated stumpage revenue foregone figures net of credits for road construction?

5) Page 16, Table 5, Estimated Employment Foregone:

a) Direct logging is given as $2166\text{m}^3/\text{person year}$. The source of this figure is Statistics Canada publication 25-201, Logging. This publication gives approx. the same figure used in the Report for B.C. Coast logging, but gives a figure of $5447\text{m}^3/\text{person year}$ for B.C. Interior logging, for 1978. The appropriate figure for the portion of the Study Area in the Vancouver F.R. should be determined based upon whether this portion lies in the coast, interior or an intermediate zone. The interior logging figure should be used for the Kamloops F.R.

b) The Stats. Can. figures are based on m^3 of finished product (logs), not on m^3 cut. The ratio of m^3 finished product to m^3 cut should be determined and used in the calculation of direct logging employment.

c) The estimated employment foregone calculation should be further reduced because the Proposal Area is smaller than the Study Area.

d) Statistics Canada publication 35-204, Sawmills and Planing Mills, and Shingle Mills (1978), gives B.C. Coast and Interior sawmilling productivity of 2018m^3 and $2090\text{m}^3/\text{person year}$ respectively. These figures reflect local employment.

If some of the output from the Study Area is used for pulp mill supply, then there will be non-local employment created.

Item b) and c) apply also to this calculation.

e) According to Reed, 1975, The B.C. Forest Industry, Its Direct and Indirect Impact on the Economy, the indirect employment (Province wide) is $\frac{1}{2} \times$ direct employment and the induced employment (Province wide) is $1 \times$ (direct employment + indirect employment).

Reed defines two additional terms, basic and non-basic, which enable an estimation to be made of the local employment dependent upon the forest industry. For each basic job there is one non-basic.

To summarize

	<u>Kamloops Forest Region</u>	
	<u>Status</u>	<u>Modified</u>
	<u>Report</u>	<u>Figures</u>
Direct logging (LRSY)		7
Direct milling	—	19
Total direct	60	26
Indirect ($\frac{1}{2}$ x direct)	30	13
Induced (multiplier of 2)	<u>90</u>	<u>39</u>
Total	180	78

Considering "local jobs" only, the following figures apply:

Basic	(direct)	26
Non-basic	(multiplier of 2)	26
Total local		52

Note that "local jobs" refers to all the communities in the area, not just Princeton, and that Reed states that the multiplier is less than 2 for small communities.

Not only are the Status Report figures highly incorrect, but there is an inference that the total number of jobs are local.

In addition, the modified figures are high, for the reasons given in items b) and c), and the small community multiplier. It is absolutely imperative that the employment figures be correctly calculated before the Report is submitted to ELUC.

6) Page 61; the second paragraph under Section 4.1.1, Timber, is grossly misleading. It infers that present jobs will be lost in Kamloops F.R. However, Merritt TSA report shows that there is enough timber for at least 50 years at present commitment levels. During the next 50 years, it seems highly likely that the 2% of the TSA cut represented by the Proposal Area can be easily picked up. The Cascade

Wilderness LRSY is $16,700\text{m}^3/\text{yr.}$ or $39,745\text{m}^3/\text{yr.}$ or something in-between. According to the Merritt TSA report, the rehabilitation potential of the NSR, DSD and NC land in the Merritt TSA is $82,000\text{m}^3/\text{yr.}$ if silviculture is done. Unsalsvaged losses are also estimated at $82,000\text{m}^3/\text{yr.}$; obviously, research and development on pest control could save timber. Use of small Lodgepole Pine gives 5% increase in gross mature volume. Increased basic and intensive forestry, improved utilization and improved access into other areas can also increase timber supply. By setting aside the Cascade Wilderness area, it is very unlikely that any present jobs in the forest industry will be lost. The advent of reforestation and improved forest management will undoubtedly result in a substantial increase in local forestry employment.

The Ministry of Forests study by Crown Zellerbach Canada of the Okanagan TSA concluded that the province can maintain or expand its timber supplies with self financing silviculture programs.

Additional employment and revenues generated by increasing funding for silviculture has not been taken into account in the Status Report.

Grazing

On p. 63 of the Status Report, an assessment is made by the Ministry of Forests of the effects of grazing being excluded from the Study area. This is misleading, because the OSPS submission does not call for exclusion of grazing. Also, an economic assessment has not been calculated for optimization of grazing potential which is an important omission.

Fish and Wildlife

Much of the information is inaccurate and incomplete, especially for deer and fish, based on local knowledge and observations. No figures at all should be published until the Fish and Wildlife Branch has taken the time to do a proper assessment. Also, the lack of present and potential

revenue and employment data conveys the misleading impression that the potential is insignificant.

Parks and Outdoor Recreation

Parks and Outdoor Recreation has not made a submission for Section 4, Agency Recommendations. Since all the other agencies submitted recommendations, and none of them recommended complete preservation of the Proposal area, a misleading impression may be conveyed depending upon what recommendation Parks would have made.

We believe that Parks and Outdoor Recreation should be asked to submit a recommendation, or else all of the other recommendations be deleted from the Report.

The lack of potential revenue and employment data conveys a misleading impression.

Heritage Conservation Branch

The present inventory of heritage trails does not reflect current knowledge and recently identified sections of these trails.

Information Gaps

1) Studies should be done to evaluate the potential economic value to the local area and to B.C., of designating the Proposal area as a wilderness conservancy. Balanced against the losses in forestry would be gains in wilderness tourism. The preservation of fish and wildlife, heritage and wilderness values will result in increasing tourist and economic potential, particularly following official protection and promotion of the area's wilderness values. Tourism is rapidly becoming the #2 industry in B.C. and may become #1 in the foreseeable future. Wilderness tourism is a particularly fast-growing aspect of tourism. Recent surveys in prominent local magazines reinforce this claim, and also the rapid increase in usage of trails and wilderness areas such as the West Coast trail and Bowron Lakes.

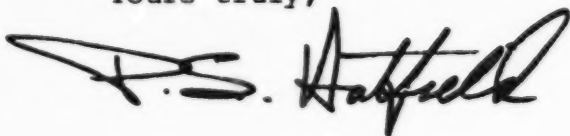
2) Referring to Section 6.2.1 of the Status Report, the effect of resource use on water quality and quantity should be studied for the towns of Tulameen and Coalmont as well as for Princeton.

Final Comments

We agree with the concept of having a Steering Committee oversee completion of the Cascade Wilderness Study, but object to the proposed co-chairmanship of Ministry of Forests and the Parks and Outdoor Recreation Division. The weakness of the Parks and Outdoor Recreation Division is well known, and Forests would run roughshod over them. We suggest that an impartial person be selected as chairman, possibly a provincial judge or an independent consultant acceptable to all agencies and the public.

Finally, we realize that to correct the inaccuracies in the Status Report will take several weeks, and to fill the information gaps is a major undertaking that will set back the timing for completion of the Cascade Wilderness Study for some time. However, the Merritt TSA Report shows that there is no urgent need to harvest the Study Area timber. Surely this area is important enough to merit a thorough study of its present and potential values so that a responsible land-use decision can be made.

Yours truly,

A handwritten signature in dark ink, appearing to read 'P.S. Hatfield', with a stylized, flowing script.

P.S. Hatfield

POOR

QUALITY

ORIGINAL

